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ILLINOIS HISTORICAL SURVEY

VOLUME VIII.—1862.

THE

ILLINOIS TEACHER:

DEVOTED TO

Education, Science, and Free Schools.

ALEXANDER M. GOW, Editor.
SAMUEL A. BRIGGS, Associate and Mathematical Editor.

PEORIA, ILLINOIS:
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PROSPECTUS FOR 1863.

THE

ILLINOIS TEACHER---VOLUME IX.

TO OUR PATRONS AND FRIENDS:

Twelve months since we were invited to take the Editorial Chair of the ILLINOIS TEACHER and assume the responsibility of its management. We appreciated the honor conveyed by the invitation, while we hesitated to accept it as the successor of HOVEY, BATEMAN, DUPEE, and WILLARD. But we did accept, with the promise to devote whatever we had of time, energy, and talent, to the accomplishment of the work. And now, having arrived at the point for which we started — the completion of the year,— we may take a retrospect of our labor.

We have tried to make the TEACHER interesting and profitable to all desirous for the promotion of popular education. Our aim has been to make it a practical exponent of educational systems and reforms, especially to the young and inexperienced teacher. How far we have done this our patrons must determine: we can only form our opinion from the many kind and complimentary notices of our contemporaries, and from the fact that our list of subscribers has been very largely increased.

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We have been assisted by the contributions of some of the most intelligent and successful teachers in the state, to whom we feel under personal obligations. The admirable expositions of the principles of the school law given by Superintendent Bateman have rendered the Teacher valuable to school-officers in particular; and not only in this has he rendered efficient service, but in his official capacity has done much for the extension of the subscription list.

And now we enter upon another year. We can only promise, as we did one year ago, to do every thing in our power to promote all the interests of Education. The times require that all educators should unite their efforts to promote the welfare of the profession and the good of the schools. We will welcome well-prepared articles to our columns, and all items of local news. We trust our friends will spare no exertions to keep the educational car from running backward; and if the times prevent us from making great advances, we shall at least lose nothing already gained.

A. M. GOW.

As will be seen by the above, the chief editorship of the Teacher will remain during the coming year in the hands of Mr. A. M. Gow, under whose management for the past year the journal has constantly been growing in favor with the public, and, we have reason to believe, in usefulness also.

It gives us pleasure to add that Mr. Samuel A. Briggs, who has been Associate and Mathematical Editor of the Teacher for the last year and a half, will during the coming year be associated with Mr. Gow in the editorship. Mr. Briggs will have special and exclusive charge of the 'Mathematical' Department and 'Notes and Queries'. Contributions for both these departments are solicited from all.

Mr. Gow's address is *Rock Island;* Mr. Briggs's, *P. O. Box* 3148, *Chicago.*

The Teacher will continue to be the Official Organ of the State Educational Department. The recently-elected Superintendent, Hon John P. Brooks, authorizes us to say that he will publish in the Teacher his official correspondence to the teachers, schools and school-officers of Illinois; and that he will avail himself of the same medium to communicate, as he may find opportunity, during the course of his official duties, with those who are engaged in the great educational enterprises of the day.

The Publisher has but little to add to the above except the usual business announcements. The increase in the subscription-list of the Teacher during the past year has been a gratifying evidence that the teachers and friends of education in Illinois are determined that their organ shall be sustained through this trying period of our country's history. Without considerable further increase, however, the greatly-enhanced cost of paper and other printing-materials, and the advanced prices of labor, will render it necessary to reduce the number of pages in each monthly issue of the Teacher from 40 to 32. By a little exertion on the part of our friends — the prompt renewal of old subscriptions and the addition of a few names to the lists — this necessity will be avoided. We hope the requisite effort will be put forth, for we are much opposed to taking any step backward.

The January number will be issued about the 20th of December: all who desire to have the volume complete should send their subscriptions by that date if possible. The February number will be issued about the middle of January, and will contain the report of the State Association. The remaining numbers of the volume will be mailed by the first of the month for which they bear date.

Terms of Subscription.— For a single copy, One Dollar a year. Eleven copies for Ten Dollars; Twenty-three copies for Twenty Dollars, and any additional number ordered by a person who has already ordered twenty-three copies will be sent for 85 cents each. The copies ordered for a club will be addressed to the individuals composing the club, and will be sent to different post-offices, if so desired.

All subscriptions will begin with the month in which they are received, unless special instructions to the contrary are given: back numbers will always be furnished as far as possible when requested. Payment in all cases in advance.

In sending subscriptions be careful to write all names of persons and post-offices distinctly. Fractions of a dollar may be sent in postage-stamps.

Any subscriber to the Teacher can obtain any one of the Eastern $3 Monthlies by remitting to us Two Dollars, or two or more of them for Two Dollars each.

N. C. NASON, Publisher.
Peoria, Illinois.

ILLINOIS TEACHER.

VOLUME VIII. JANUARY, 1862. NUMBER 1.

ILLINOIS STATE TEACHERS' ASSOCIATION.

EIGHTH ANNUAL MEETING.

REPORTED BY DR. SAMUEL WILLARD.

BLOOMINGTON, THURSDAY, DECEMBER 26 — 9 O'CLOCK A. M.

THE Association met in Royce's Hall, and was called to order by the President, Mr. W. H. WELLS, of Chicago.

Prayer was offered by Mr. T. N. MCCORKLE, of Clinton.

On motion of Mr. POPE, of Mt. Morris, it was ordered that all resolutions be referred to the Committee on Programme, unless otherwise specially ordered.

The President then delivered his address, an abstract of which has been requested for publication.

Mr. W. H. HASKELL, of Canton, moved the appointment of an Assistant Secretary, to aid in preparing railroad return-tickets. Agreed to.

On nomination of Mr. BRIGGS, Mr. HASKELL was appointed.

Mr. FITCH, of Peoria, moved a committee of three on the President's Address. Agreed to. Committee — Messrs. FITCH, BAKER of Quincy, and POPE of Mt. Morris.

On motion of Mr. HEWETT, the order was suspended to receive a report from the Treasurer, Capt. IRA J. BLOOMFIELD, now in the army, who was not able to remain with the Association.

Capt. BLOOMFIELD reported $14 received at Quincy, and $2 from the former Treasurer, Mr. WOODWORTH, of Warren, and suggested the appointment of an Auditing Committee.

Mr. KERR, of Rockford, moved the appointment of such committee. Agreed to. Committee — Messrs. KERR, BAKER of Quincy, and ETTER of Galva.

Mr. PARKER, of Sterling, was appointed Treasurer *pro tem.*

Miss S. L. STOCKING, of Galva, read an essay on the *Importance of History in Common Schools.*

A recess was given to allow persons to enroll their names as members.

A drill-exercise by Mr. FITCH, of Peoria, on *Reading*, then was called. He would conduct the exercise as he would a first exercise with a new class. Taking the members of the Association as a class, he would question them accordingly. With preliminary questions, he brought out the thought that in reading the reader must regard three things: the Mechanical, Intellectual and Rhetorical relations of his subject. He must be able to make the sounds needed, to understand the meaning of his sentences, and to express the associated feelings. He illustrated the use of the muscles and lungs in reading, with exercises in breathing, sighing, gasping, forcible expiration, and panting. He next illustrated the use of the lips, tongue, and teeth.

Mr. HICKS, of Galena, was called upon to remark upon the exercise and its subject. He said that reading is much talked of, and ill taught, as all admit. Few are able to give any precise direction as to proper modes of teaching. 'Teach to read naturally', some say: but how is that to be done? Mr. Fitch would begin by training upon the mechanical part of the art. No man can succeed alike with all pupils, as no artist can make Titians or Rembrandts of all his scholars, and no architect can make all his pupils Angelos: but all these can be taught the rudiments of their several arts. So all children can learn the main principles of reading. We can not give them capacity; we can not give them power to understand all of Shakspeare, to sympathize with the poet and give expression: even great students of the drama hesitate upon some points and vary in opinions. He related an anecdote of Mrs. Siddons: in rendering the words of Lady Macbeth in reply to the words of her husband —

Macbeth.—If then we fail —
Lady Macbeth.— We fail —
But screw your courage to the sticking-point
And we 'll not fail:—

She tried various modes of uttering the words *we fail:* at first, 'We *fail*$^{\vee}$?' next, '*We*$^{\vee}$ fail'?' then, with equal emphasis upon each word, '*We*$^{\vee}$ *fail*$^{\vee}$!' finally, she chose the simple utterance as a finishing of Macbeth's hesitating supposition, 'We fail$_{\wedge}$.' If Mrs. Siddons could study and choose, our pupils need not be expected to be infallible in their reading. But they can be taught to read current literature and the newspaper with ease and with understanding.

After a few words from Mr. Haskell, Mr. Roots, and others, on the payment of the annual fee, the Association took its noon recess.

TWO O'CLOCK P. M.

The first exercise was a drill-exercise in Map-Drawing by Mr. W. WOODARD, of Chicago.

Mr. WOODARD said that in our schools we are giving pupils too much to do, too many things in one day: reading, writing, spelling, arithmetic, grammar, history, all in one day; and if the intellectual and physical digestion fail, the school-doctors are prescribing 'physical exercise'. He thought we should take fewer lessons and have them more thoroughly learned. In geography we must, as in other things, begin with elements, and proceed with thoroughness. He then called from the audience a volunteer class of five gentlemen, whom he placed at the black-board. Picking up a hat, he told them to draw a line as long as the hat: no line was found quite accurate. Similarly a shoe was made the object, with a still greater variation. He then ordered the class to draw a line a foot in length; this was repeated several times, and similar exercises in drawing lines of various lengths and dividing them, and in forming squares and circles of assigned magnitudes, with internal concentric squares and circles, occupied considerable time, and caused much amusement. The pupils were required to perform their movements together, at the word of command. These exercises were followed by exercises in drawing the lines peculiar to map-drawing, with which the lesson closed.

Miss FANNY MARSHALL, of Quincy, read an essay on *Teaching Geography*.

Mr. BAKER, of Quincy, read an essay on *Graded Schools*.

A recess then took place.

At the close of recess, after music by the choir from the Normal School, under lead of Mr. MESSER, Music-Teacher there, the discussion was announced on the question 'Ought Free Public High Schools to be Sustained?'

Mr. HESLET, of Mendota.—The question has long been legally settled by law-makers and judges, both in this country and in Europe. In Europe such schools are maintained at public expense. In our own country schools of various grades are in fact established, including high schools. No court had ever held any school-law invalid on account of any extent of course of study. Objections are made to payment of taxes for such purposes. But it is found in fact that the rich

are not losers by the payment of school-taxes, because of the rise in value of property and in rents. Mr. H. specified an instance in which this was fully ascertained to be true, by the rise of values on the building of a school-house, and their fall when it was destroyed.

Mr. EDWARDS, of St. Louis.—This question can not be decided upon general principles. We must decide it by experiment, by general opinion, by average, as we are often compelled to do. We must proceed upon the general assumption of the value of man as man, of the human mind, and of its culture, and carry it forward avoiding extremes and doubtful experiments. It is a public interest that all minds should be developed. We never could have been what we now are if Eli Whitney had not been so educated as to invent the machine which has made cotton cloth so cheap. Where shall we end? I do not see. The State has an interest even in the university and the special school. If a poor boy ragged in the streets remains undeveloped because the public school closes its course of education too soon, there is a public loss. True, there are limiting conditions: the very struggle with adversity in the pursuit of knowledge is itself an education and of great value. Without deciding where the line should be drawn, I consider it decided that the public High School should be a constant part of the system of public education.

Mr. PICKARD, State Supt. of Wisconsin.—I will notice some objections. The expense is first. This is well grounded in many cases: great expenditures are ventured upon to put up a costly building, when a smaller and plainer one would have been better, and money could have been spent upon apparatus and the employment of better teachers. No expense will make the hill of science, as depicted in the spelling-book, any easier to climb, or make a genius of a blockhead; nor can you buy a capacity. Another objection is made by those who do not like to educate other people's children. Now I think every man should have children of his own to educate; and if he has not, he should be taxed as a penalty. But if he is childless, his property will go to some one; and it should go to those who can use it wisely, and they should be educated. And his property is protected by the education of the community.

I go in for High Schools on account of the support they give to schools of lower grade. I can certify this from a fact in our State. In one of our cities the High School was discontinued: thenceforth the grammar school was less cared-for by the pupils and the people. This will be found true every where: the incentives of the system reach even to the primary school.

Mr. JOHONNOT, of Joliet, next presented thought upon *Methods in*

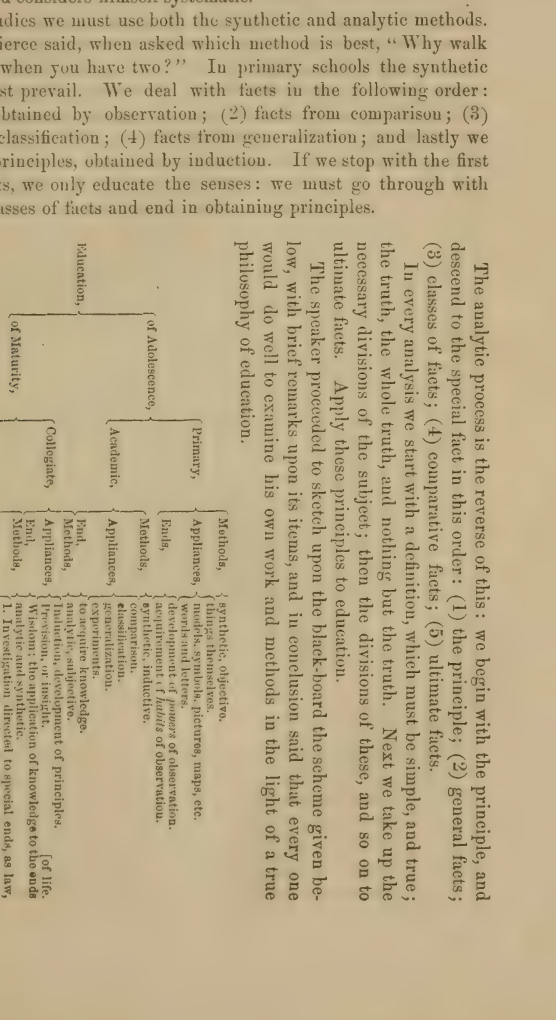
Study. In most schools there is the most-objectionable want of method — subjects are taken up in the middle and finished at both ends. Again, habit is by many supposed to be system. The teacher moves in a rut, and considers himself systematic.

In all studies we must use both the synthetic and analytic methods. As Prof. Pierce said, when asked which method is best, "Why walk on one leg when you have two?" In primary schools the synthetic method must prevail. We deal with facts in the following order: (1) facts obtained by observation; (2) facts from comparison; (3) facts from classification; (4) facts from generalization; and lastly we reach (5) principles, obtained by induction. If we stop with the first class of facts, we only educate the senses: we must go through with all these classes of facts and end in obtaining principles.

The analytic process is the reverse of this: we begin with the principle, and descend to the special fact in this order: (1) the principle; (2) general facts; (3) classes of facts; (4) comparative facts; (5) ultimate facts.

In every analysis we start with a definition, which must be simple, and true; the truth, the whole truth, and nothing but the truth. Next we take up the necessary divisions of the subject; then the divisions of these, and so on to ultimate facts. Apply these principles to education.

The speaker proceeded to sketch upon the black-board the scheme given below, with brief remarks upon its items, and in conclusion said that every one would do well to examine his own work and methods in the light of a true philosophy of education.



Mr. EBERHART, of Chicago, moved the election of the following as honorary members: Hon. J. L. PICKARD, J. FORD, CHAS. H. ALLEN, and S. H. PEABODY, all of Wisconsin. They were elected.

Mr. PARKER, of Sterling, moved that a committee be appointed, of one from each congressional district, to nominate officers, to report to-morrow. The motion prevailing, the President said he would announce the committee in the evening.

Mr. POPE presented a report from the Committee on the President's Address, returning the thanks of the Association therefor, and asking an abstract thereof for publication in the *Teacher*. The report was adopted, and the Association adjourned.

SEVEN O'CLOCK P.M.

The Association met, and, after music by the Normal Choir, listened to a lecture by Rev. Dr. J. M. STURTEVANT, President of Illinois College, on *Female Education*. An abstract of this lecture will appear hereafter.

After music by the Choir, the President announced the Nominating Committee, as follows: Messrs. GEO. HICKS, of Galena; J. D. PARKER, of Sterling; S. M. HESLET, of Mendota; M. V. B. SHATTUCK, of New Boston; N. A. PRENTISS, of Warsaw; C. H. FLOWER, of Springfield; E. PARK, of Decatur; JAMES P. SLADE, of Belleville; and L. H. ROOTS, of Duquoin.

Mr. POPE, of Mt. Morris, moved a 'Committee on the State of the Union', to draft resolutions with reference to the present state of public affairs and to our brothers in the army. He accepted a modification creating a general committee on resolutions, which was ordered: and Messrs. POPE, EBERHART, and ETTER, were made such committee.

The Association then adjourned.

FRIDAY — NINE O'CLOCK A. M.

The Association was opened with music by the Choir, and prayer by Rev. D. A. WALLACE, President of Monmouth College.

The Essayist whose name was next on the Programme not being present, the next exercise was called: an exercise in *Gymnastics* or 'Physical Exercise', conducted by Mr. S. H. WHITE, of Chicago, with an extemporaneous class of gentlemen, accompanied with remarks on the exercises suitable for schools.

Mr. DELANO then gave a drill-exercise in *Book-keeping*, showing how, by oral instruction, in common schools, a competent knowledge of the use of the ordinary account-books can be given.

Mr. WELLS followed with a few remarks urging the importance of the study; contrasting it with 'cube-root', 'partnership', and other matters in which pupils are drilled at school, and which they never use afterward. He advised all to keep a cash account, as a measure of self-discipline and economy.

The Committee on Nominations presented the following nominations as their unanimous report; one place in the Committee on Programme being left vacant, to be filled when the place of meeting is selected:

President, WM. M. BAKER, of Quincy: *Vice-Presidents*, J. B. KERR, of Rockford; HARRISON S. HYATT, Fulton City; F. ROWE, Bloomington; AMOS F. WATERMAN, Aledo; N. A. PRENTISS, Warsaw; HENRY L. FIELD, Mechanicsburg; T. N. MCCORKLE, Clinton; JAMES P. SLADE, Belleville; B. G. ROOTS, Tamaroa: *Rec. Secretary*, E. L. CLARK, Springfield: *Cor. Secretary*, S. H. WHITE, Chicago: *Treasurer*, J. D. PARKER, Sterling: *Committee on Programme*, ———, ———; W. H. HASKELL, Canton; S. M. HESLET, Mendota.*

On motion of Mr. BRIGGS, of Chicago, the report was accepted, and the President was requested to cast the vote of the Association for the persons named; which being done, they were declared elected the officers for the ensuing year.

After music by a quartette of gentlemen, recess was given, during which some amusing gymnastic performances on the floor illustrated the saying that the race is not always to the swift.

Business being resumed, bills were presented and referred to the Auditing Committee, the duties of which were enlarged to consideration of such matters.

Mr. PARKER, of Sterling, moved that a copy of Dr. Sturtevant's address be requested for publication in the *Teacher;* or if this be denied, an abstract of the same. Agreed to.

Prof. TURNER, of Jacksonville, then delivered a lecture on *Teaching Chemistry in Common Schools.* The hearers of Mr. Turner's lectures know that they are themselves 'portable essences' of the subjects upon which they treat, and that the reporter who seeks to make a running abstract soon lays down his pen in despair.

At this point Mr. WILKINS passed up the aisle bearing an Ameri-

* Mr. J. B. KERR, of Rockford, was afterward transferred to the Committee on Programme, and Mr. A. F. TOWNSEND, of Galena, became V. P. in his place.

can flag, which was greeted with repeated cheers. The singing of 'The Star-Spangled Banner' was called for; Mr. Haskell led, the audience joining in the chorus.

Mr. POPE, from the Committee on Resolutions, presented the following resolutions:

Resolved, That the present direful civil war against republican government and human rights was kindled upon and is now fed and supported by a want of general information among the masses of the common people in the Southern States, consequent upon the discouragement of public instruction in those States.

Resolved, That, as public instructors, patriots, and anti-monarchists, we pledge to the Government our hearty support *in whatever way it may be necessary* to maintain the Union of the States, and to suppress, not only misguided rebellion, but also and especially that other and more dangerous foe, the spirit of and desire for monarchy and privileged order in those States.

Resolved, That we will most heartily support the Government in making use of any means whatever, in accordance with the rules of war and national honor, most speedily and effectually to quell and for ever put to rest the spirit of rebellion and treason against our Republican Government.

Resolved, That, far from forgetting, we remember with pride our fellow teachers of this and other States who are now in arms to defend on the battle-field those principles which they have enjoyed and labored to disseminate in the quiet retreat of the lecture-room; and we hereby remind them that, if the exigency shall come, there are thousands of others ready to leave all and 'strike till the last armed foe expires', and the Stars and Stripes shall float triumphantly from every point of the dearly-redeemed but priceless Union.

On motion of Mr. PARKER, the report was accepted.

Mr. FENN, of Joliet, moved that the resolutions be adopted by a rising vote.

Mr. ROOTS, of Tamaroa, moved to amend the third resolution by adding the words 'and produce a cordial reünion of the States'.

Mr. Roots's amendment was lost, and the resolutions of the committee were adopted without change.

The President announced as next in order a discussion upon the subject of Mr. Turner's lecture.

Dr. SEWELL.—A teacher should know something of this subject, of course, and know what to select. As the lecturer said, the naked formulas are disgusting and useless. Let the teacher call attention to what passes before the eyes of the pupils: the coal in the stove turned to ashes, smoke, gas, and heat; the wood that is burned in like manner. Where did the ashes come from, and where did the other part of the wood and coal come from, and where have they gone? Compare different substances: tobacco gives one-fourth its weight in ashes, corn but one-fiftieth; which draws most from the soil? So attention may be called to the fundamental principles, which the pupil must

sooner or later come to. The speaker quoted Liebig's remark about soap as a test of civilization; and suggested the chemical relations and history of soap: he showed how increased demand for soap had affected the arts and commerce.

Some announcements were made, and Mr. WILKINS, of Bloomington, invited the members of the Association to a social gathering this evening, in Phœnix Hall.

It appearing from some informal discussion that some prior action of the Association upon a proposition of Mr. Roots to amend the resolutions on national affairs was had under a mutual misunderstanding, Mr. HASKELL offered the following, which was unanimously adopted:

Resolved, That this Association is unanimously in favor of the restoration and perpetuation of the American Union established by our fathers.

After singing 'The Red, White and Blue', the Association took the noon recess.

TWO O'CLOCK P.M.

The Association resumed its business.

Mr. ROLFE presented some resolutions on the death of President Lorin Andrews, of Kenyon College, which were referred to the Committee on Resolutions, under the rule.

A drill in 'Physical Exercise' was conducted by Mr. O. W. HERRICK, of Harlem, most of the gentlemen of the Association and some of the ladies joining as a class.

Mr. CHAS. H. ALLEN, Agent for the Normal Regents of Wisconsin, gave an address upon *Teachers' Institutes.*

The mass of teachers do not and will not acquire training in Normal Schools, nor even through our educational literature. In Wisconsin, two years ago, it was found that out of 2,000 teachers but 400 read educational journals, and but 300 were subscribers. Our institutes are often liable to objections. Too much time is consumed in business forms, in listening to dry lectures and essays of little practical value. A celebrated oculist when asked how he acquired such skill replied, "Oh, I spoiled a bushel of eyes before I learned how to do it." Do not many of our teachers wish to go back and do over their early work? The speaker read Mr. Barnard's idea of what an Institute should be, and enlarged upon it.

Teachers can not work effectually against public sentiment; but they can do much to form it: at present, with adverse public sentiment, half our power is lost. The mass of teachers in a State are

never gathered in a State Association, while most of the teachers of a county can be brought into an Institute, and thus be taught something. Too many teachers teach from hereditary ideas, and teach as mechanically as they would hoe corn or hem handkerchiefs. Too many are hired upon the theory that one can teach who has been taught: just as truly is one fit to practice medicine who has been doctored. In Wisconsin we have endeavored to show both to teachers and parents the necessity of special training. I have asked at least four thousand teachers the question "How many of you are satisfied that your classes are properly graded in the matter of Reading? that they are not reading in books at least one grade too high for them?" Not more than forty have been able to profess themselves satisfied. In arithmetic, too, scholars are pushed forward to *cube-root*, and the pupils are anxious to get forward at least as far as *interest*. In all branches this forcing process prevails.

In Wisconsin I have found that we are running to seed in one direction: mathematics overrides every thing. In some schools little is taught but mental arithmetic, written arithmetic, and algebra: and I have found young men who could not read intelligently nor intelligibly who were spending their whole time upon mathematics.

In excuse for these evils the teachers skulk behind public opinion; and institutes give great aid in correcting and instructing the public mind.

Mr. STONE, from the Committee on Programme, stated that the next lecture on the programme would not be forthcoming, Rev. Mr. King, of Quincy, not being in the city; and referred the further order of the programme to the Association.

On motion of Mr. FITCH, it was ordered that the time of the exercise be filled with brief speeches from gentlemen from abroad.

Mr. ALLEN, in reply to a question, stated that in Wisconsin a large number of lectures had been delivered for the express purpose of informing the minds of the people as to the qualifications of teachers and the characteristics of a good school. A recent movement will probably secure graded certificates of teachers.

Mr. KERR, of Rockford, raised the question whether a certificate of first class should be given for mere knowledge of the subjects to be taught.

Mr. EBERHART.—I give the third grade to those tolerably-well qualified by knowledge of the branches required; the second grade to those fully qualified by knowledge; and the first grade only to those who show special aptitude for their business and have had special experience in teaching.

Mr. WELLS.— What has our Legislature done to aid Teachers' Institutes?

Mr. ROOTS.— Nothing.

Mr. EBERHART.— They have altered the laws so as to allow the supervisors specific authority to grant aid to institutes from the county treasury.

Mr. ROOTS.— Institutes are most needed in just those counties where no appropriation can be obtained. Something is needed to give a start in such counties. We need in such counties the aid of persons who can and will come down within reach of common folks and common teachers, and show how the most elementary subjects should be presented.

Mr. SHATTUCK.— It is the duty of a good teacher to work against public opinion when it is unenlightened, and to elevate it to a higher plane.

Mr. ALLEN.— In Wisconsin we have saved by the instruction given at Teachers' Institutes upon school architecture more than double all that has been appropriated for institutes.

Recess was taken for ten minutes.

Order being recalled, after music by the Choir, the Committee on Programme announced that Mr. PICKARD, of Wisconsin, would take the place of Mr. BATEMAN as lecturer this evening, the latter being, from illness, unable to speak.

Persons from abroad were called for to report upon the state of education in their localities.

Mr. Edwards, of St. Louis, was called upon.

Mr. EDWARDS.— Secession and education are incompatible. I have seen the influence of slavery upon the young whites, making them intractable. These principles have been at war in Missouri. Before the civil war broke out our best schools were, out of St. Louis, private schools: these have been destroyed by the strife. The effect upon schools in St. Louis has been this: Gov. Jackson seized all the revenues that he could to favor secession, including $40,000 belonging to the city: also the ordinary revenues have been diminished, and its has scarcely been possible to keep up the schools; but, by strict economy and by requiring a tuition-fee, they have been sustained, as have also the High School and the Normal School. There are in the High School almost as many pupils now as when it was, as High Schools should be, free: and there is greater interest on the part of the people.

No other gentleman from abroad being present, the Auditing Com-

mittee presented, by Mr. Kerr, the following report, which was adopted:

Your committee report that they commenced their investigations with the session of the Association held at Ottawa, in 1859.

They find an acknowledgment from N. Woodworth of the receipt of $127.75 from the former Treasurer; also for membership-fees $2.00. It appears that Mr. Woodard, of Chicago, was appointed Treasurer *pro tem.* While acting as Treasurer he paid Mr. Beecher, through Mr. Wright, $25 for his lecture, for which no receipt was taken. He also paid P. P. Heywood $25, for which he took receipt, and delivered the receipt, with the money in his hands, to N. Woodworth, the Treasurer-elect.

Mr. Woodworth presents two receipts from P. P. Heywood: one for printing, telegraphing, postage, etc., of $17.75; the other of $60 paid to Mr. Smith, of the *Chicago Tribune*, for services as reporter, and Messrs. Wallace and Foote for lectures.

The last-mentioned amount was paid out in pursuance of an order by the Association on the Treasurer to pay all that remained in the treasury to the three gentlemen above named. The $2.00 reported in the treasury were paid by persons joining the Association after the passage of the resolution. His account stands thus:

N. WOODWORTH *in account with the* ILLINOIS STATE TEACHERS' ASSOCIATION.

Dr.		
To cash from former Treasurer	$127 75	
To Membership Fees	2 00	
		$129 75
Cr.		
By cash to Mr. Beecher	$25 00	
By cash to P. P. Heywood for printing, etc	17 75	
By cash for Reporter and Lecturers	60 00	
By cash to P. P. Heywood (application not stated)	25 00	
By balance on hand	2 00	
		$129 75

Receipts appear for every thing except the amount paid Mr. Beecher; and for this Mr. Woodard distinctly recollects there was no receipt taken.

Your committee recommend that the future business transactions of the Association be put on record, and not left as matters of tradition.

Respectfully,

JAMES B. KERR,
S. M. ETTER,
WM. M. BAKER, } Committee.

Mr. FITCH moved a resolution respecting the Pestalozzian system adopted in Oswego and elsewhere, and asked that it go to the committee in course, which was allowed.

Mr. POPE, from the Committee on Resolutions, reported back the resolutions of Mr. Rolfe respecting President Andrews, with recommendation that they be adopted.

Mr. ROLFE said that Col. Andrews was the first man who offered

himself as a volunteer to the Governor of Ohio last April. This prompt self-sacrifice was characteristic of him. He was for some years agent for the Ohio State Teachers' Association, having begun the work without appointment, as a volunteer. So when a successful political rival asked his help when in difficulty, he dropped his own work and went to his aid.

The resolutions were unanimously adopted, as follows:

Resolved, That we have heard with profound sorrow of the death of Lorin Andrews, late President of Kenyon College, and Colonel of the 4th regiment Ohio Volunteers.

Resolved, That, while we bow with humble submission to this dispensation of our Heavenly Father, we can not but deeply feel that in his death our country has lost a brave and noble soldier; the cause of education one of its ablest advocates and most successful laborers; his family a kind and most excellent husband and father; the Church an exemplary and faithful member; and we a true friend and industrious co-worker.

Resolved, That we deeply sympathize with the family in their bereavement.

Resolved, That our Secretary is hereby requested to forward a copy of these resolutions to Mrs. Andrews, at Gambier, Ohio, and to the *Ohio Educational Monthly* for publication.

Mr. POPE, from the same committee, reported back Mr. Fitch's resolution, with recommendation.

Mr. ROOTS moved that it be adopted.

Mr. ROOTS.— I have derived great assistance from the reports of the Oswego school sent me by the very obliging Superintendent, who will willingly favor any who wish them, in like manner. I would rather have failed of a hundred dollars than of them.

The resolution was adopted, as follows:

Resolved, That we highly approve of the establishment of the Pestalozzian Training-School for Primary Teachers, at Oswego, N.Y., and of the introduction of the Objective System of teaching in our own State, so far as it is adapted to the genius and necessities of our public schools.

Mr. POPE, from the same committee, offered a resolution respecting the *Illinois Teacher*, which was received.

Dr. WILLARD, late Editor of the *Teacher*, urged upon the Asso-sociation the duty of the members to subscribe for the *Teacher*, and to write for it frequently.

Mr. EBERHART followed, urging the same matters, and commending the *Teacher*.

The resolution was adopted, as follows:

WHEREAS the *Northwestern Home and School Journal* and the *Illinois Teacher* have been united in the latter; therefore,

Resolved, That it is the duty of every teacher in the State to subscribe for and labor to extend the circulation of this our own excellent school journal.

Mr. POPE, from the same committee, reported the following, which was adopted:

Resolved, That C. D. Wilber, Secretary of the Natural-History Society, has our unqualified approbation and encouragement in his efforts to establish a Museum worthy the State and her teachers, and we gladly recognize his great success in so doing.

Mr. JOHONNOT recommended to the teachers *Herbert Spencer's Essays on Education*, and N. A. Calkins's work on *Object-Lessons*.

Mr. POPE reported a resolution of thanks, etc., as follows; which was unanimously adopted:

Resolved, That the hearty thanks of this Association are hereby returned to the people of Bloomington for their cordial hospitality; to the Normal Choir for their excellent music; to the Committee of Reception for their undivided attention to our wants and comfort; to all the speakers, lecturers, and managers, for the interest, profit and success of this session; to Dr. Willard for his faithful service as Editor of the *Teacher* during the past year; and to the Chicago, Alton and St. Louis, the Great Western, and the Galena and Chicago Union Railroads, for their kindness in granting us free return passes.

Mr. POPE raised the inquiry whether the selection of the place of meeting should be left to the Committee on Programme.

Pres. WALLACE, of Monmouth, extended, on behalf of the teachers of Warren county, an invitation to meet at Monmouth in 1862.

Mr. KERR, of Rockford, moved that the Association hold its next meeting in Rockford.

Mr. FLOWER urged that the next meeting be held at Alton; there has never been a meeting south of the centre.

Mr. STONE urged the advantage of Rockford.

Mr. TEWKSBURY, of Freeport, seconded Mr. Stone's representations.

Mr. Kerr's motion was unanimously agreed to.

Dr. WILLARD moved that the time of meeting be left to the Committee on Programme; which was agreed to.

Dr. WILLARD moved that the vacancy in the Committee on Programme be now filled; which was agreed to.

Mr. KERR, of Rockford, offered resignation of his office as Vice-President, which was accepted; and he was appointed by the Association to fill the vacancy in the Committee on Programme.

Mr. A. F. TOWNSEND, of Galena, was chosen Vice-President to fill the vacancy.

The Association then adjourned.

SEVEN O'CLOCK P. M.

A lecture was delivered by Hon. J. L. PICKARD, of which an abstract will be hereafter furnished.

After music by the Choir, Mr. FORD, of Milwaukee, invited the members of the Association to meet the Wisconsin teachers in their State Association next August.

The President then returned thanks to the members of the Association for their courtesy toward him, and for the good order with which business had been transacted. On his way hither he had felt doubtful of his own ability, and whether he had sufficient knowledge of Cushing and Jefferson, and parliamentary precedents and usages; but he had had no need of any special skill in that branch. Of his successor he could say that he had been succeeded by him before: when, some years ago, he had left Massachusetts, Mr. BAKER had taken the place left by him; and his work had commended him. In a few years he found that the same man had followed him to the West, and was as earnestly at work here. He was glad to give place to him again. "Will Mr. Pope please conduct the President-elect to the chair?"

Mr. POPE conducted Mr. BAKER to the chair, Mr. WELLS giving him the station.

Mr. BAKER said that the year before us as a nation and as individuals is to be one of earnest work: we are on trial before the world, which may be arming against us. The results and the future can not be foretold. Many of our friends and of those who have before met with us are now on the field: who can tell where we shall be within the year? Let us remember this meeting as one that has given us earnestness, a substratum to our characters that we had not before had. Let us labor for the year to come so that we may feel that our work has been done truly, and so that those whom we meet shall be the better for their intercourse with us.

Mr. HASKELL, of the Committee on Programme for the ensuing year, asked for some expression of the preference of the Association for a time of meeting: whether it should be in the summer, or in the holidays. A resolution was passed expressing a preference for the holidays, *nem. con.*

Dr. WILLARD moved that the Association now adjourn finally: the the motion prevailed, and the Association closed its session.

EXAMINATION FOR STATE CERTIFICATES.

REPORT OF THE SECRETARY OF THE STATE BOARD OF EXAMINERS.

BLOOMINGTON, ILL., DEC. 27, 1861.

THE following gentlemen, appointed by the State Superintendent of Public Instruction, under the Amendatory Act of 1861, as a State Board of Examiners, convened at Bloomington for the examination of candidates for State Teachers' Diplomas, viz:

WILLIAM M. BAKER, A.M., Principal of Quincy High School;
J. D. LOW, A.M., Superintendent of Public Schools, Springfield;
E. C. HEWETT, of the Normal University;
ALEX. M. GOW, A.M., Principal of High School, Dixon;
W. WOODARD, 2d, Principal of Jones School, Chicago;
JAMES H. BLODGETT, A.M., Principal of Public School, Amboy.

Board organized by electing Mr. WM. M. BAKER President, and Mr. JAMES H. BLODGETT Secretary.

A preliminary meeting was held at the High-School Building on Monday, Dec. 23d, at 7 P.M., for the examination of credentials of such candidates as had arrived. On the following morning the Board of Examiners met again at the same place. Those whose credentials were found satisfactory as to character and success in teaching were addressed by the Superintendent in a few remarks as to the mode of examination, which corresponded with the plan detailed below.

Each candidate drew a number from a box, by which number he was designated and known throughout the written examination; and the names of those bearing particular numbers were not known to the Board till the work was finished and the standing of each candidate duly recorded. Envelopes and paper were distributed, and each applicant was directed to write his address in full on a slip of paper, place the slip within the envelope, seal it, and inscribe his number upon the outside. Each applicant was also required to furnish the Board with written answers to the following questions:

(1) Place of birth. (2) Where educated. (3) Age. (4) Number of years' experience in teaching. (5) Number of years taught in this State. All of which were duly entered upon the records of the Board. No candidate was deemed eligible to examination who had not taught at least three years, and at least one year in this State.

Printed questions were distributed, upon each of which the time

was noted within which answers were to be given. The papers containing answers were marked with the respective numbers of the candidates writing them, and at the end of the allotted time were collected, together with the slips of printed questions which each had used. During the morning, Orthography, Reading, and History of the United States, occupied each one hour. Commencing at 2 P.M., Mental Arithmetic occupied one hour, Written Arithmetic one hour and a half, Geography forty-five minutes. In the evening nearly three hours, commencing at 7 o'clock, was devoted to oral examination on Theory and Practice, in connection with Grammar, Mental Arithmetic, and Reading. The candidates were divided into three classes; each class remaining nearly an hour under examination in one branch, then changing rooms, so that all were examined in succession in each branch named, and the mode of teaching it.

In this examination the record was, of necessity, kept against names in stead of numbers. The results were kept separate from those of the written examination until that was concluded and results recorded. By this division into sections an amount of work was performed in three hours which would otherwise have required nine. On Wednesday morning, commencing at 8.30, written examination in English Grammar occupied one hour and a half, Algebra one hour and a half, and Geometry one hour. It was found that the time allotted to some of the branches was too short for answering all the questions printed, and in such cases a part of them were omitted.

After the examination in the above branches was completed, the Superintendent briefly addressed the candidates. He quoted the section of the Act of 1861 which empowered him to issue State Diplomas to those found worthy upon examination by himself or those whom he might appoint. He had preferred to appoint examiners, for reasons which will readily occur to all. He should act, in giving the Diplomas, entirely upon the recommendation of the Board, who would recommend, in writing, those found worthy. He was specially anxious to have every thing so conducted as to afford no reasonable ground for complaint, and to have the examination so just, strict, impartial, and fair, as to give additional value to the Diploma. He spoke of the present meeting as pleasant and encouraging. He was glad to see that professional spirit — the *esprit du corps* — which teachers began to manifest. He regarded this as a nucleus around which the best sentiment would rally.

The Chairman of the Board briefly stated the mode in which record would be made of the work. He gave notice that the numbers of successful candidates would be read on Friday, at the close of the session

of the State Association; after which, those bearing such numbers could call at the Superintendent's room and obtain their Diplomas. Any who might be obliged to go home earlier would be notified by mail of the decision respecting them.

The Board found that they had in hand over six hundred pages of manuscript to examine. A final meeting was held Friday morning. The marking of the written examination was summed up; the envelopes containing the names were opened; the written and oral examinations compared; and the work of the Board concluded by the accompanying recommendation of two ladies and sixteen gentlemen.

Of the unsuccessful candidates it is but just to say that one had scarcely entered upon his work when he was obliged to leave from illness; another indicated his purpose to try again — a commendable spirit. The whole number of candidates present was twenty-three.

The Board regard the class of candidates as a very good one. Some are of very superior scholarship and skill as teachers. The class of teachers now bearing these Diplomas, so early in the progress of the movement, is a guaranty of strict watchfulness against any lowering of the standard for Diplomas, and a strong promise of good for the future. Poor teachers or poor scholars can not gain the position these hold without hard study and hard work. Especially is it encouraging in the present state of the country, when so many leading teachers are called to the battle-field, to find so much strength and professional zeal still at home.

The pressure of the meetings of the Association made the work severe, and rendered it necessary to omit the *written* examination in Theory and Practice. Care will be taken that hereafter other exercises do not cramp the examination so as to put undue work, excitement and difficulty on candidates, or compel the Board to omit any thing they deem desirable.

Owing to sickness of his family, Mr. Gow was able to spend but a short time with the Board, and being absent when they made up their recommendation, his name does not appear with the other signatures.

J. H. BLODGETT, Sec'y Board Examiners.

The following is the recommendation and award of the Board, above referred to:

Bloomington, Ill., December 27, 1861.

Hon. N. Bateman, *Supt. Public Instruction:* As the result of the examination conducted by the undersigned during the present week, we would unanimously recommend that State Teachers' Diplomas be issued to the following persons: Messrs. H. S. Hyatt, Henry M. Bush,

John D. Parker, F. W. Livingston, Geo. B. McElroy, J. B. Roberts, H. G. Pollock, John Page, Homer Hatch, Oliver H. Martin, James Gow, C. W. Richmond, F. G. Fowler, M. V. B. Shattuck, Alexander J. Anderson, Wm. P. Terry, and Misses Jane Ormsbee and Fanny Marshall.

(Signed) WM. M. BAKER, J. D. LOW, E. C. HEWETT, W. WOODARD, 2ND, J. H. BLODGETT, } Board of Examiners.

EDUCATION—ITS SUBJECTS, MEANS, AND OBJECTS.*

I. The human soul was considered as having powers of THOUGHT, or of perception and intellection; powers of FEELING, or of emotion; and powers of WILL, or of action: and when a man has all three of these classes of powers naturally and harmoniously developed, so that he thinks rightly, feels rightly, and wills rightly, his education is complete, and there is nothing more or better that education can do for him or that he can do for himself.

Of the three classes of powers it was shown, both from nature and from scripture, and from the common-sense of mankind, that the merely intellectual, though the first in the order of action, is the lowest of the three in the order of its importance; inasmuch as what a man feels and does is of more consequence than what he merely perceives and thinks. The perceptive and merely intellectual powers were regarded as all culminating in what we call mere *thought;* the emotive powers in our tastes—intellectual, moral, or social; and the voluntary powers in our choices or acts of will, so far as the soul itself is concerned, and ultimately in all our external actions, good or evil.

It was maintained that, as our senses are the great inlets or instruments of our powers of thought, by which they are brought into contact and discipline from the outer world, so the muscular system is the great bodily instrument through which the will, or powers of action, receives its proper corrective discipline and development from the outer world. Hence, weakness of body, or neglect of the proper

* An Abstract of an Address by Prof. J. B. TURNER, delivered on the occasion of the Dedication of the Museum of the State Natural-History Society to the Citizens and Schools of Illinois, at the State Normal University, Dec. 25th, 1861. Prepared by the author, by request, for publication in the *Illinois Teacher.*

use of its active organs, not only weakens the body, but correspondingly impairs the force of the highest power of the soul—the power of a steadfast and indomitable will in all rightful and truthful action, —and unfits the man, in the inevitable duties of life, either properly to provide for himself or to take care of the interests of others. So the Greeks and Romans derived not simply bodily strength from their active methods of culture, but corresponding strength to the highest power of the soul—power of will: so the neglect of this, and an attempt to confine our children through the whole of their growing years to a mere intellectual drill, has correspondingly enfeebled and crippled our national power of will, and left us a prey to all those evils and vices which an inordinate and an unnatural culture and development of the bare powers of thought is sure to induce.

II. As regards the MEANS of educating the human soul, they were considered to be the whole created world, which is the great schoolroom, filled with its object-lessons of infinite variety, giving rise to all forms of science; and the primal social institutes or *classes*—the Family, the State, and the Church; and the primal industrial institutes or *classes*—the Field, the Shop, and the Market: all, in their essential elements, ordained of God, the great father and teacher of all, for the sole end of properly educating the human soul in all its threefold capacities, and kept in existence, in forms more or less complete, in all ages of the world: all of which make their appeal not to our powers of thought alone, or of feeling or taste alone, or of action and will alone, but to all these alike, harmoniously and incessantly.

Such is the plan of the great Creator and Teacher of all; and such in principle must be the plan of all other educators who would succeed in their work of rightly developing all the powers of the whole man.

The forms of knowledge were also considered by which it is possible to develop the mere power of thought, or intellect. They are threefold—the *intuitive*, the *hereditary*, and the *scholastic*. The *intuitive* is that which comes to all men alike by intuition, and is vastly wider in its range than either of the others, and marks the difference between the untutored man and the brute. The *hereditary* or traditional form of knowledge is the next widest in its range, and flows down outside of the schools freely to all men, through the family, the state, the church; the field, the shop, the market; the rostrum, the pulpit, the press; and through whatever other modes there are, outside of the schools, of diffusing public thought and sentiment over the whole of society. This form of knowledge marks the difference between the highly civilized though technically uneducated man and

the mere savage, whose knowledge lies mainly in his intuitions, undeveloped by the power of social civilized life.

The last form of knowledge available for intellectual development or power of thought is that which occurs through our schools, and is therefore termed the *scholastic*. It naturally divides itself again into two parts — the scientific, and the classical or literary: the first arising from the action of the mind on nature, in examining and classifying its various objects and powers for more convenient consideration and use; the other, from the action of the world back upon the mind itself — its thoughts, feelings, actions and destinies, individual and social. Hence, again, it appears that the proper work of the school must be mainly if not merely intellectual, or designed to develop and discipline only one-third of the powers of the soul or man — the mere powers of thought, which, though the first in the order of action, and indispensable to all the others, are really, in and of themselves, of no use to the man or to the world, unless the other powers are also correspondingly developed.

Hence we see why it is that the mere schools can not make even the ninth part of a man; because they can reach only, at best, one-third of his faculties, and can command less than one-third of the knowledge that is indispensable to the development of the whole man. We see, also, the reason why so many youth, without any other scholastic education than that bare capacity to read which throws them fairly into the great stream of hereditary knowledge, so often surpass in life those who have been drilled in schools all their days; it is not because they have greater talents, but because they have had a better education — an education under the tuition of God, in the great struggle of natural life and action, where all their powers of thought, taste and will were naturally and harmoniously developed and disciplined, and not the bare power of thought alone.

We see, also, why females need so much less mere scholastic education, either scientific or classical, than males; for through the female mind the great stream of hereditary knowledge more readily and freely flows, while on it alone both her duty and destiny more entirely depend. God has insured, in the main, her proper education for her peculiar sphere, by enabling her to drink in her needful knowledge chiefly from this great stream, by a sort of intuition and inspiration not given to man, who can only come to the same practical ends and results as it is pounded into his coarser nature by the schools or by the hard experience of actual life. Both nature and destiny alike require the one to learn mainly by this intuition or inspiration, and the other by the slow processes of logic and experience.

We also see the extreme mischief of our long terms and long school-hours, especially for young and growing children: shutting them up from all the social inspiration of the family — its struggles, toils, hopes, and fears; from the real world without, with all its visions of glory and beauty, and all its conflicts of labor and toil, to the bare, dry intellectual husks, through all their growing years We thus get mere monstrosities, not men; mere intellect, without proper and natural tastes or wills, without proper bodies or souls; with mere power of thought so inordinately developed, and corresponding wants so stimulated, which no attendant power of will or of action can supply in any of the ordinary modes of life, that the boy is of necessity half a villain to start with, and will be a whole one if some one does not take care of him beside himself. Hence the land is full of educated villains, who prey upon every department of human society, financial, state, and national; whom no law can restrain, and no courts detect and punish: and we most innocently look over our jails, and, because we do n't find them there, we try to fancy that they do not exist.

The remedy proposed is to go back to the customs and the common-sense of our fathers, and keep the great mass of our children, while young and growing, under the natural discipline of the family, the field, and the shop, for the proper development of their emotive and active powers both of body and of mind, through at least one half of the year, and under the scholastic discipline of the schools not more than the other half. If this course should be pursued, it is believed we should have, if not better scholars, at least better men for all real uses in life than now.

The Museum was consecrated to the use of the people and schools of Illinois, for the development of all the powers of the soul — thought, taste, and will; and for the ends of social and industrial art and democratic empire in peace, and for its stern defense in war.

SCHOOL FURNITURE AND APPARATUS. — Number I.

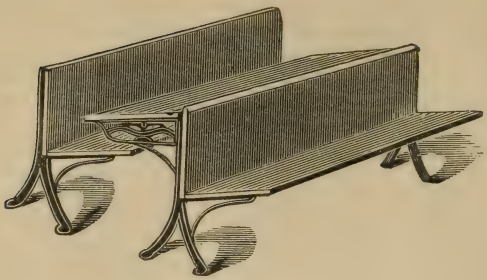
Within the last six or eight years no State in the Union, probably, has erected more school-houses for the education of its children than our own. In many of these buildings the preservation of health, the demands of taste, and the requirements of convenience, have been regarded in their provisions and arrangements; but a very large proportion, in common with those of other States, are unsuitable for the

purposes of education. They are too small, badly located, badly seated, without the necessary means of ventilation, and, above all, destitute of all the means and appliances necessary to make a school in the highest degree successful. By a few simple operations in addition and subtraction it may be shown that no district can afford to support a poor, unfurnished school-house. Any one who has ciphered through 'Daboll' can figure up, to some extent, the cost of keeping up such a concern. If he is more accustomed to figure in agricultural or mechanical employments, let him estimate what can be done on the farm or in the work-shop, in a given amount of time, with the tools of thirty, forty or fifty years ago, as compared with what can be accomplished in the same time with the machinery of the present day. Apply the same figuring in the matter of education: reckon the sums of money annually sunk in paying teachers to work without suitable tools or means,—not forgetting that, as a general rule, you will be compelled to put up with the poorest teachers, for the best will not put up with such accommodations without extra compensation; add to this the loss of half or three-fourths of the school-time of your children; calculate the value of that knowledge and intellectual culture which your children are thus deprived of for ever; compute, if you think you can, the amount of loss sustained in injured lungs and spines and eyes, in colds and fevers and consumption, and all the train of evils generated and aggravated by the defects of an ill-constructed and ill-furnished school-house. Bring together these and other items in one grand total, and then say whether any community can afford to support a poor, unfurnished school-house.

But, in stead of dwelling on these defects and deformities, and the multitude of evils attending them, let us assume that we have a school-house well located, properly constructed, supplied with mats, scrapers, clothes-closets, and a suitable place for fuel, and proceed to notice its internal arrangement, or furniture. One of the first things to be done is to properly seat it. The most desirable style of desk is the single desk and chair; but the amount of room required for a given number of scholars and the extra expense attending prevent their use except in the most costly buildings.

The next style in desirability is known as the double desk and chairs, or desk made long enough for two scholars, with chairs accompanying.

The next in style of modern desk is the Combination Desk, or desk and seat attached, one of the most approved of which is presented on next page. This style, for cheapness, neatness and convenience combined, has no superior. They are so inexpensive that they are within the means of every school-district, as the cost is but a trifle more than



COMBINATION DESK.

if made with clumsy wood ends, while it contains the essential requisites of a good desk and seat. The end-pieces are made of cast-iron, and are of such form that they are convenient to sweep around, and allow the scholar to get in and out of his seat without difficulty.

Each desk should be supplied with an Ink-well, fitted into the desk so as not to rise above it, and fastened to it. For this purpose I know of nothing equal to what is called the 'Perfection Ink-well', which is fastened to the desk by screwing into it.

In arranging the seats, they should be so placed, if possible, that the scholars shall sit facing the north, the light being admitted on the east and west sides, where it is most needed in the early and latter parts of the day: at all events, there should be no light admitted in front of the scholars, as the light thus direct is injurious to the eyes.

The standard length of this desk is three feet six inches, and it is made of different sizes, to accommodate large and small pupils. The desk is securely fastened to the floor by means of screws.

In mixed schools or schools composed of scholars of all ages, as most of our country district schools are, the smallest size should be placed in front, and the largest at the back of the room. For the desks in the rear of the room there is a *back and seat* made to correspond with the others. The edge of each desk and seat should fall on a perpendicular line, so that in standing each seat and desk occupies but about two-and-a-half feet in width. They should be so placed as to admit of liberal aisles between the rows, and allow one wide enough for convenient passage entirely around the outside of the room.

The teacher is supposed to have a good desk, placed on a platform slightly elevated, with drawers on either side containing room for his books and papers. This should be in front of his school, where he can get the attention of his scholars if desired. D.

SCHOOL EXERCISES.

QUESTIONS USED AT THE EXAMINATION OF CANDIDATES FOR THE DORCHESTER (MASS.) HIGH SCHOOL.

GRAMMAR.— 1. Into what parts is English Grammar divided?

2. What is a noun, and how many kinds are there? Tell what they are.

3. Write a sentence containing a noun in the nominative case, a relative pronoun in the objective case, one transitive and one intransitive verb.

4. Correct and parse the corrected words in the following sentence: The hall was lighted brilliant, and the exercises was performed excellent well.

5. Explain the difference between a simple and a compound sentence, and give an example of each.

6. Analyze the following sentence:

> "From the climes of the sun, all way-worn and weary,
> The Highlander sped to his youthful abode."

7. Tell what parts of speech the *thats* are in the following sentence: Is it true that that book that that young lady is reading is a novel?

8. What is the rule for the comparison of adjectives? Illustrate it by examples.

9. Write the three cases in the singular and plural of the following words: man, ox, horse, lady, I, she, who.

10. Write the following verbs, with the pronoun, in the past tense, first person, singular: be, begin, bite, buy, choose, do, flee, fly, lie (to rest), see, sit, tear, write.

ARITHMETIC.— 1. A man has one billion dollars. He loses nine hundred ninety-nine million nine hundred ninety-nine dollars, and then adds to the remainder six hundred six dollars: How much has he then?

2. A lady has one ten-millionth of a pound of assafœtida. It all evaporates in six months: How much evaporates per day, reckoning 30 days per month? Give the answer in the form of a decimal, and tell what kind of a decimal it is.

3. What is the sum of $\frac{1}{3}$, $\frac{3}{4}$ of $\frac{2\frac{1}{2}}{6}$, and $\frac{9\frac{2}{5}}{4\frac{1}{3}}$?

4. The distance around Dorchester is 20 miles, 3 furlongs, 8 feet: How long will it take a snail to crawl around if he crawl one inch per minute? Answer in days, hours and minutes.

5. A man sells cloth at $4 per yard, and by so doing loses 10 per cent. on the cost: What would he have gained or lost per cent. if he had sold it at $8 per yard?

6. What is the interest of $500\frac{5}{100}$ from February 2, 1860, to the date of this examination, at 7 per cent.?

7. A man wishes to receive of a bank, for 60 days, $500: For what amount must he give his note?

8. What is the fifth power of 1, the seventh power of 2, and the third power of $\frac{3}{7}$ of .0003?

9. A man has a strip of land 20,000 rods long and 50 rods wide: How many rods of fence will it take to fence it? How many rods would it take if the same land were in the form of a square?

10. A man has a cubical cistern $10\frac{1}{2}$ feet deep: How many feet of water will it hold?

GEOGRAPHY.—1. What is longitude, and from what point is it reckoned?

2. Name the divisions of British America, and their capitals.

3. Draw an outline-map of Massachusetts, with the rivers and principal towns.

4. What countries in Europe are peninsulas?

5. Mention the principal mountains in Europe, and the countries in which they are situated.

6. What rivers in Hindostan? What are the chief towns?

7. Where is Japan? What is its capital, and how situated?

8. Give the divisions of Africa, beginning on the North.

9. What groups of islands in Oceanica?

10. Through what seas, straits, oceans, etc., would you sail in a voyage from St. Petersburg to Marseilles?

HISTORY.—1. When and under whose patronage did Columbus sail on his first voyage to America? Where did he land? To whom did he apply for assistance in vain?

2. Who was King Philip? What were his plans, and what his fate?

3. When and by whom was Maryland first settled?

4. Give an account of William Penn, his acts, and character.

5. State the objects and results of Braddock's expedition.

6. What events occurred in Boston in March, 1775?

7. In what year did the Revolutionary War commence; and when and where was the treaty of peace signed?

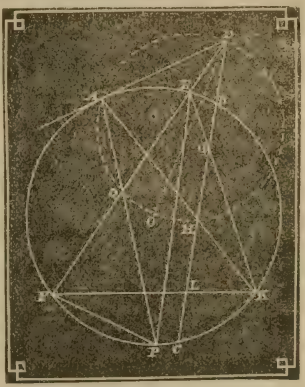
8. When and by whom was the Constitution framed?

9. What was the cause and what the date of our last war with England?

10. Which of the Presidents of the United States have died in office?

MATHEMATICAL.

XXV (*September*). PRIZE DEMONSTRATION, by Prof. W. D. HENKLE, of the Southwestern Normal School, Lebanon, Ohio.



The diagram being drawn as per theorem, we are to prove GH =HL.

Construction. Draw AP thro' Q, the point where the inner secant cuts the semicircle DAO, previously described to get the point of tangency, A; also draw EP and FP.

Demonstration. The line PQ in the triangle EPF bisects the base EF, since Q is the middle of EF. The triangle GKL is similar to EPF, and KH is similarly drawn to PQ, and hence bisects GL in H. Q.E.D.

Remark. Q is the middle point of EF, since OQ is perpendicular to the chord EF. It is perpendicular to EF because DQO is an angle of a semicircle and therefore a right angle. The angles GKH and EPQ, HKL and QPF, GKL and EPF, are respectively equal because they are measured respectively by the same arcs. The angles KHL and PQF are equal because their equal opposite angles are measured by half the arc DA.

[We are glad to welcome to our pages our contemporary of the *Ohio Journal of Education*, and hope to have the pleasure of hearing from him often.—ED.]

PROBLEMS.—I. There is a piece of cork such that 2 cubic feet of iron being attached to it the whole will weigh in water 40 ounces. How many cubic feet are there in the piece of cork, the specific gravity of iron being 7.788 and that of cork .240? F. F.

II. A clock has an hour-hand, a minute-hand, and a second-hand, turning around the same centre. They are all together at 12 o'clock. It is required to find — 1st, when the hour-hand will be between the other two and equally distant from them; 2d, when the second-hand will be between the other two and equally distant from them; 3d, when the minute-hand will be between the other two and equally distant from them. J. W. O.

III. A gun which may be heard n miles on land or m miles on water is stationed at the centre of a circular island. What must be the diameter of the island that its area shall be to the area filled by the sound of the gun as a to b? L. B.

COMMENTS ON THE SCHOOL LAW.

DEPARTMENT OF PUBLIC INSTRUCTION,
Springfield, Ill., Jan. 1862.

Questions.—What is the proper course for a School Commissioner to pursue when he finds that schools are being taught in his county by persons who have no legal certificates, or whose certificates had expired by limitation prior to their employment? What is the nature and extent of the liabilities of Boards of Directors in case they employ teachers without requiring them to exhibit their certificates; or without any allusion to the subject of certificates at the time of employing said teachers; or when they are ignorant whether said teachers have certificates or not; or when they know that said teachers have not certificates at the time of said employment? What legal principles apply to such cases?

Remarks.—The line of conduct to be adopted by the Commissioner, and the obligations and liabilities of Boards of Directors, may readily be inferred from the 52d section of the Act under which the points submitted in the above interrogatories evidently fall. That section is as follows:

"No teacher shall be entitled to any portion of the common-school or township fund, or other public fund, or be employed to teach any school under the control of any Board of Directors of any school-district in this State, who shall not, before his employment, exhibit to said board, or to a committee of said board, a certificate of qualification obtained under the provisions of this Act; nor shall any teacher be paid any portion of the school or public fund aforesaid unless he shall have kept and furnished schedules as herein directed."

The language of this section is clear, explicit, and peremptory. It forbids any Board of Directors to *employ* a teacher until he exhibits his

certificate. If they do so employ a teacher who has not, at the time of such employment, a valid certificate of qualification from the School Commissioner of the county, as required by law, they not only become liable to the fine prescribed by the 76th section of the Act, for 'failing to discharge the duties enjoined upon them *in the manner required by law*', but they also become, in my judgment, personally liable for the teacher's wages for the time during which he was permitted to teach without a certificate; because, a school taught by a person who has not a legal certificate is *not* 'conducted according to law'—is not a public school within the meaning of the Act. The School-Law (one of its essential requirements not having been complied with) does not recognize such a school; and hence the agreement between the directors and the teacher, under such circumstances, not having the sanction of the school-law, must be viewed as of the nature of a private contract, and mutual liabilities and obligations of the parties are such, and such only, as arise from and are governed by the general law of contracts.

But the section quoted goes further. It not only forbids the *employment* of teachers who have not valid certificates at the time of being so employed, but peremptorily forbids the *payment* of teachers so employed out of 'the common-school or township or other public fund'. Should a teacher be permitted to close his schedule without complying with the provision of law under review, it is manifest that the directors can not certify said schedule in the prescribed form; for the law requires them (Sec. 53) to declare in express terms that the 'teacher *has* a legal certificate of good moral character and of qualifications to teach a common school', and that the school '*was* conducted according to law'. No schedule is legal or valid, nor can a township treasurer accept or in any manner recognize or pay a schedule, in which the above facts are not expressly set forth in the certificate of the directors. But how can the directors affirm that the teacher *has* a certificate, when they either do *not know* that he *has*, or *do know* that he has *not?* Or how can they assert that the school was 'conducted according to law', when they know that unless the teacher has a legal certificate his school can not be conducted according to law?

But if the directors should, either in ignorance or in deliberate violation of the law and of truth, venture to certify the schedule, in the case supposed, it would, nevertheless, be the duty of the treasurer to refuse payment, provided he was formally and officially apprised of the facts in the case. For, although a treasurer can not, as a general rule, go behind the schedule and challenge the truth of the directors' certificate, yet he is bound to do so in a case of such manifest disregard or

violation of law as the one under consideration; *provided*, as before said, that he has positive and official information on the subject.

This leads me to remark that full authority to proceed in such cases is clearly vested in the School Commissioner; and having the power, it is, in my estimation, his duty to act in the premises. The law does not, it is true, in so many words, require of him to search out and correct this particular class of abuses; but the right and obligation to do so spring from and are necessarily incident to the general character of his official trusts and duties. The right of proceeding against the offenders in question is not, of course, restricted to the commissioner; but every view of the case points to that officer as the one upon whom the responsibility should *primarily and chiefly* devolve. He alone is invested by law with authority to license teachers, to grant and revoke certificates; and hence, as the appointed guardian of the public interests in respect to the competency of teachers, it is within his legitimate official province to satisfy himself that every teacher in his county has a proper certificate, and to check any attempt to evade the plain demands of the law. For directors and teachers to presume to act without his sanction, or assume the right to do so, would be to compromise the public interests intrusted to him, for which he would be justly accountable, and a violation of his exclusive prerogative which he could not suffer to pass unnoticed.

It would be no valid reply to this legal view of the subject to say that some commissioners perform their duties in a careless and superficial manner, and that others are entirely incompetent to perform them at all. The usual apology offered in extenuation of the conduct complained of is *ignorance* of the law, or unintentional *neglect*. But it is manifest that neither of these pleas can be entertained for a moment in justification of the infraction of so express and mandatory a provision of law as that contained in the 52d section of the Act. In respect to the *former*, it may be said that even if we should waive the legal maxim that every citizen *is presumed to know the law*, it would remain as a bar to the plea that the section of law in question has not been changed in word or letter since the foundation of our present system of public instruction. The plea of *neglect* is worse than none at all. It is simply a confession that the law was violated willfully and without excuse, without even the pretense of ignorance. But such pretexts are too frivolous for serious argument.

In all cases, therefore, embraced in the inquiries to which these remarks are intended as a reply, it will be proper for the School Commissioner to notify the treasurers concerned, in writing, not to pay any portion of the school-fund upon schedules of schools taught by

persons not having legal certificates. Said notices should specify particularly the township, district and teacher referred to, and the length of time during which the teacher taught without a certificate; the penal forfeiture applying, of course, only to such period of time. In like manner the School Commissioner should apprise the directors and teachers concerned of their action in the premises, and assure them that the forfeiture will cease as soon as the provisions of the law are complied with.

It will be understood that the views here presented apply to cases where teachers have not legal certificates *at the time of their employment.* It often occurs that certificates which are in force at the time their holders were employed and commenced their schools expire by limitation *prior to the close* of the term or period for which the teachers were engaged. In such cases it is held that, since the conditions required by law existed *at the time the contract was made*, said contract is not invalidated by the above contingency; but the schedules should be paid for the whole time embraced in the contract, the same as if the certificates were promptly renewed at their expiration. But while this opinion is believed to be entirely sound in a legal sense, I would, nevertheless, earnestly recommend that certificates be in all cases renewed without delay at their expiration. This course would prevent the possibility of delay and trouble, and hence the wisdom of its adoption is manifest.

NEWTON BATEMAN, Sup't Public Instruction.

VALUE OF THE COMMA.—In the priory of Ramessa there dwelt a prior who was very liberal, and who caused these verses to be written over his door:

"Be open ever more, O thou my door,
To none be shut, to honest or to poor."

But after his death there succeeded him another, whose name was Raynard, as greedy and covetous as the other was bountiful and liberal, who kept the same verses there still, changing nothing therein but one point, which made them run after this manner:

"Be open ever more, O thou my door,
To none, be shut to honest or to poor."

Afterward, being driven from thence for his extreme niggardliness, it grew into a proverb that for *one point* Raynard lost his priory.—*Sel.*

EDITOR'S TABLE.

EDITOR'S CHAIR.

To our Friends and the Friends of Education.—In accepting the responsibility of sitting in the Editor's Chair of the *Illinois Teacher*, which has been occupied and so ably filled by our friends Hovey, Bateman, Dupee, and Willard, it is with no affectation of modesty or diffidence that we address you. To be a teacher of a little flock in some secluded spot, untrammeled by the reflection that our work is to be reviewed and criticised by judgment and experience superior to our own, is a responsibility of no mean magnitude to one who appreciates the importance of the teacher's vocation; but to assume the position of teachers' teacher, to stand in the front rank, to encourage, to cheer, to counsel and direct those who are seeking to educate the thousands of the children and youth in our State, is a task immeasurably embarrassing and oppressive. We would not hazard the risks of the position, had we not the kind assurances of friends not unacquainted with the labors required, that a sympathizing charity should overlook our errors and defects, and a kind coöperation should aid us in our work.

It shall be our earnest wish to furnish such matter to the young and inexperienced as will enable them to meet the exigencies of the school-room with confidence and success. Every thing prepared for such a purpose will have a practical bearing. Another special object will be the promotion of the 'Profession of Teaching'. If teaching is both an art and a science, if all the recognized liberal professions derive their eminence from it, then surely it has strong claims for its recognition. Hitherto the standard of literary attainment has been so low, and teachers have seemed to manifest so little self-respect in all matters pertaining to their own business, that it is not strange that others were unwilling to award what they were so negligent in deserving and demanding. To enable teachers to become more proficient in their business, to raise the standard of their scholarship, and to compel their recognition as professional men, we will do every thing in our power to promote the efficiency of our State Normal University; increase the number and improve the character of Teachers' Institutes; and stimulate school-officers to do their part in promoting this great end.

A third object which we design to do our utmost to promote is the correction of false ideas on the subject of school-architecture, and the dissemination of such true principles as will secure the adaptation of the means to the desired end.

As it is our desire to educate the *masses of the people*, it will be our pleasure to enlist all the educational elements, public and private, to assist in the work. Public schools are not antagonistic to institutions carried on by private enterprise and supported by private patronage. There is generally room enough for all; and

until *all the children of the State* are well instructed, the true friend of education will find but little fault with the means by which it is effected. The great mass of our youth must receive their school-training from the common schools, or be for ever excluded from the school-room, while the few will be favored by the advantages afforded in the private institution. While we are the special friends of the public system, wishing the greatest good to the greatest number, we would not wish to be considered inimical to the interests of any, as all are needed for the work.

To County Commissioners.— *Gentlemen:* In assuming the responsibility of the editorship of the educational organ of the State, I have been led to scan the educational field, in order to ascertain who are my allies, and who should be my assistants in the work. It is proper that my first appeal for aid and sympathy should be to you, who are the popular representatives of the cause we seek to promote. The people have confided to your keeping most important interests. They look to you, and the teachers look to you, to be earnest and vigilant to perform the duties assigned you. The times are significant of great changes, social, civil, and educational perhaps. Amid the difficulties and dangers in which we find ourselves, we can not make that steady, onward march that has marked the past; let us, then, endeavor to preserve what has already been attained. Let there be no retrograding sentiment entertained by the people, if we can contribute in any way to prevent it. How shall we prevent it? We shall prevent it if we are hopeful ourselves, and earnest in impressing our own feelings on the public mind by the pen and voice. Sympathy in works of philanthropy is contagious. If we in the educational vanguard exhibit a spirit of self-sacrificing energy, others will catch our enthusiasm, and the influence thus extending will embrace others, until the combined efforts of all educators will stay the hand that would ruthlessly be laid on our educational institutions. Your work, as Commissioners, is but poorly requited. "The laborer is worthy of his hire," and he should receive it too; but in the labor imposed on us, the most we can expect, as a general rule, is the censure and abuse of the ignorant, the misrepresentation of the vulgar and vicious, the opposition of the selfish, a considerable share of coldness from those who ought to sympathize with and aid us, and, last but not least, *the precious consolation that in an humble way we have endeavored to do something to benefit our people and preserve our glorious system of free institutions.* Yours must be, in a great degree, a labor of love and philanthropy; ours as Editor is even more so: how, then, shall we encourage each other?

It will be our desire *to benefit* you by throwing out such hints as are suggested by our own experience and observation, and gathered from our exchanges, from educational works, and from the contributions of such friends of the cause as shall furnish us with their views. We shall also give a synopsis of the educational movements in the State, as they come to our hands.

You can benefit the Editor of the *Teacher* by showing a sympathy for and coöperation in his work, by covering his errors with the veil of charity, and contributing short, spicy, practical matter for the press.

You can benefit the Publisher by acting as his agents in securing subscriptions from the teachers whom you examine; from School Directors, who are authorized to subscribe in order to secure the decisions of the State Superin-

tendent, who will make the *Teacher* the organ of the Department, and from the friends of the cause who desire to contribute of their means to the promotion of a good enterprise. To publish such a journal, at such a time as this, requires faith, and works, and money. Our Publisher will entertain the faith, and put forth the works, but you, gentlemen, must help to furnish the funds. Let us tug away at the educational oar, a long pull, a strong pull, and a pull all together, and with faith and hope we will weather any storm that ignorance and folly may raise against us.

How can County Commissioners discharge properly the functions of their office? The school law prescribes certain official duties which pertain to the school lands, and the distribution of funds arising from their sale. Of these executive duties it is not necessary for us to speak, since any information or suggestion on this part of their functions would come with more authority from the State Department. We wish to suggest some thoughts upon that part of their duties which is connected more immediately with the teacher and the school-room.

The examination of teachers is a most difficult and delicate task, requiring great care and caution. It is a fair presumption that our law-makers intended that there should be some TEST applied to applicants for schools. That test refers to their scholarly attainments, and their ability to govern, to discipline, and to impart instruction, and makes the County Commissioner, or his deputy, a judge of the applicant's fitness for these ends. Of course there is a great diversity of opinion as to the minimum of qualifications to be tolerated in one who aspires to teach. If it is becoming to the teacher to make a preparation for his business, it is certainly much more becoming that one who is invested with a power over the interests of teachers and schools should make himself familiar with all his duties as well as theirs. We are reminded of an anecdote which will illustrate our meaning. We had the story from the examiner himself, who prided himself upon his elevation to so important a station as the one to decide upon the merits of schoolmasters. Plowing in his field, in company with his hired man, a person came across the field, to where the functionary was at work. "As I seed him a comin," he told us, "I knowed he was a teacher a wantin a school. When he come up and spoke about the school, I told him I'd examin him; but I only axed him one question, and that was, 'What's 6 and 8 equal to?' 'Fourteen', he said. I tole him to try again. 'What's 6 and 8 equal to?' 'Forty-eight', says he. 'Not right', said I; and he looked puzzled, and turned around and seed the hand a laffin. Then he said 'If 6 and 8 are nuther equal to fourteen nor forty-eight, I ca'n't tell.' I told him '6 and 8 was equal to 10, and that we did n't want him to take charge of our school." Expressing some little surprise at the fact that 6 and 8 were equal to 10, he said, with a becoming condescension, and some little pity for our want of perception, "Don't you know that 6 and 8 squared is equal to 10 squared?" Of course light broke in upon us.

But while we bespeak a kind consideration for the teacher, especially if he or she is young and inexperienced, we also have a more urgent appeal in behalf of the rights of the school. A commissioner has no right, in accordance with the spirit of the law, to give a certificate to a teacher whom he does not know to be of good moral character, and of sufficient knowledge and ability to teach.

It is difficult to resist the importunities of persons who are known to be unqualified, either from moral or intellectual incapacity; and there is a strong tempta-

tion, 'for their much speaking' and importunity, to grant them a certificate 'because it is a small school with little scholars', or on promise to abstain from intemperance at least during school. No man should be delegated to take charge of a school who has not a good reputation.

To ascertain what the *character* of a teacher is, it is not always well to rely on an ex-parte exhibition of his *reputation*. If complaints are made on this score concerning a teacher, the commissioner should remember that he sustains the relation of judge, and should never listen to a complaint unless the party who makes it is so interested as to desire an investigation of the cause, in the presence of the accused, who has had sufficient time to secure his witnesses and prepare his defense. It is said that 'one story is good till the other is told'. This is a mischievous maxim; for one story is never to be relied on, especially in any matter affecting character, until both sides are heard. It is easier to lose a good reputation than to acquire one; and the losing is often the result of assassin-like operations, where no caution could avert, and no vigilance defend. As commissioners, hear patiently, weigh carefully, and decide justly, remembering there are 'always two sides to a cause'.

To examine teachers in order to ascertain their educational fitness is a tedious, patience-wearing operation. It can not be done properly by one himself not well versed in the object and aim of such a trial. If a teacher is able to answer, explain and illustrate the elementary processes in the several branches prescribed in the law, he will be able, so far as education is concerned, to take charge of any of the schools as usually found. But to ascertain whether this fitness exists is the question.

There are three kinds of examinations which may be used. The first is by Writing, the second by Question and Answer, and the third by Demonstration (for want of a better word); each of which we will explain.

Oral and Written examinations should be so conducted as to ascertain what the applicant does know, more than what he does not. As an illustration, I will refer you to a question proposed by a County Superintendent to Mr. Burrowes, the Chief of the Educational Department of Pennsylvania:

Question: The requirement of the Department in Orthography 'to spell any word in the English language' seems to dishearten some of our teachers. To test their ability, I used six words, seldom employed, viz: Xerophagy, Xelophagous, Zygomatic, Zinckiferous, Barytes, and Dydactylous, which few could spell. Was it the intention of the Department to embrace such words?—*County Superintendent.*

If that gentleman was not 'taking off' the Department by a sly joke upon the character of his instructions, he should have been deposed by the Superintendent for his utter misapprehension of his official duties; and we might suggest, also, for the apparent want of natural smartness to learn them. We have known many cases where examiners, wishing to illustrate their own superiority, have proposed quibbles, disputed questions, plays upon words, curious applications of principles, nice technical distinctions, and from such PUZZLES would draw their conclusions of the applicant's fitness to receive a certificate. Such examinations are much better evidences of the examiner's fitness than of the applicant's incapacity.

In order to save the examiner from misrepresentation by an unqualified and unsuccessful applicant, some questions should be prepared, in each of the principal studies required, the answers to which should be written out, and the processes where they may be necessary. These questions should be fair, unambiguous,

and have reference rather to the illustration of principles than the recollection of isolated facts. Time should be given for the work, and the applicant should be made to feel easy, self-possessed, and confident in your kindness and sympathy. When the written examination is finished, the work should be carefully examined. Writing, spelling, punctuation, use of capitals, and composition, may be thus exhibited, together with a knowledge of the subject-matter. These manuscripts should be carefully filed away; and if the applicant is dissatisfied with the estimate set on his qualifications, and is disposed to be troublesome, they can be so used as to justify the decision in the public mind.

We will continue our suggestions, concerning the other modes of examination, visiting schools, addressing the people, etc., in our next.

Our Profession.— It gives us especial gratification to record that the provision made at the last meeting of our Legislature has already borne evidence of the wisdom and propriety, and justice, too, of the legal recognition of the teacher as a member of one of the learned professions. Within a short period our State has made great educational advancement in the erection and establishment of one of the finest institutions in the United States for the preparation of teachers for her schools. Our State Normal University is one of the grandest monuments of the wisdom, the patriotism and liberality of the State. But it is not fitting that this great, grand, growing commonwealth should have meanness and parsimony illustrated in her educational and charitable institutions. It was not enough that those only who could go to school and reap the great advatages of a Normal training should be the only persons recognized as members of the 'profession'. There was great propriety in an Act enabling such as were worthy to receive the State Department's Diploma, who were past the days of special training in school, and who could only hope for a recognition upon their examination for the 'honor'.

A reference to the minutes of the Board of Examiners, given on another page, will show the number of applicants, with the names of those who were successful in securing the Diploma. It was not our good fortune to be present during the entire examination; we were there, however, sufficiently long to be satisfied that this educational experiment is no longer to be demonstrated. The appearance, the manners, the examination manuscripts, and the certificates of character, all testify to the success of this first effort at professional recognition, outside of Normal Schools, that has been made in any State. We welcome these professional brothers and sisters to the *upper story*, and hope, now that they are up, they will lend a helping hand to those below, to enable all who are worthy to rise to equal honors. One of the applicants was refused an examination, as there was such evidence before the Board as rendered it clear that the moral character was not such as to justify the holding of the Teacher's State Professional Diploma.

Illinois State Natural-History Society.— As the State Natural-History Society derived its being from the State Teachers' Association, it was deemed proper, at the Annual Meeting in July, to dedicate the Museum at such a time as would give the teachers of the State, assembled in their Annual Association, an opportunity to see what had been done during the four years of its existence in collecting, classifying and arranging the specimens exhibited in their hall. The adjourned meeting was therefore held on the afternoon of Christmas-day. The

occasion was graced by a very large attendance of teachers and citizens. The early part of the afternoon was spent in examining the natural curiosities of the Museum. At 3½ o'clock the meeting was called to order. After listening to an anthem performed by the Normal Choir, and the invocation of God's blessing, by Rev. Mr. Ames, upon the assembly and the cause which called them together, Prof. J. B. Turner was introduced as the orator of the occasion. In another place will be found a brief synopsis of the address.

Illinois State Agricultural Society.— We have received the fourth volume of the 'Transactions', through the kindness of the energetic and enterprising President of the State Agricultural Society, Wm. H. VanEpps, Esq., of Dixon. The volume contains transactions of the Illinois State Agricultural Society and of auxiliary societies in various counties, of the Illinois State Horticultural Society, and of the Illinois State Natural-History Society, together with Meteorological Table, and essays upon various subjects of general and special interest, and should be in the library of every *reading farmer* and *live teacher* in the State. We are greatly encouraged when we peruse these 'Transactions' and reflect what great educational influences are embodied therein and in the societies they represent. Each of these societies is a great school, where minds are trained and influenced to grasp the forces of nature and make them subservient to our comfort, our happiness, our taste, and our wealth. There is an intimate relation between the specialty we are trying to promote — the training of boys and girls in the school-room — and the training of the same persons in the great practical school, the County or State Fair, where what is learned in school is made of value. The People's Schools are not found alone in the humble little houses by the road-side; these are but the preparatory departments, while the higher departments of the People's University are found where all the arts that conduce to the enlightenment, the comfort and happiness of the people are brought for exhibition and sale. We will hail with pleasure the time when the Agricultural College proper shall be added to the list of our popular institutions.

People who live on prairies should be the special patrons of the Horticultural Society. If a man who plants a tree is a public benefactor under ordinary circumstances, he who will set trees by the road-side or surround his own house with a grove upon our bleak, wind-scoured prairies is deserving of especial praise. If he has no other monument raised to his memory, these will live as agreeable practical mementoes of his usefulness and enterprise. The pleasing memory of such a work is most beautifully and touchingly expressed in the lines

"Woodman, spare that tree,
Touch not a single bough;
In youth it sheltered me,
And I'll protect it now.

'T was my forefather's hand
That placed it on this spot;
Then, woodman, let it stand,
Thine ax shall harm it not."

Thanks.—We thank our cotemporary the *Carthage Republican* for its kind wishes on our taking charge of the *Teacher*. We will endeavor to deserve your good opinion, and be always in time — punctual as a schoolmaster should be.

Advertisements.— The readers of the *Teacher* will find in our special advertising sheet and the cover interesting announcements of school-books, apparatus, and sewing-machines, all of which we would commend to their notice.

School Architecture.— The drawings of the High-School building, upon which the committee reported last winter, at Quincy, were posted in the hall for examination, at the late meeting of the State Association, and created much interest. Mr. Haskell has placed them in the care of Mr. Bateman, at Springfield, for sale; and those who desire to build a house to accommodate about six hundred scholars, and to cost from thirteen to fifteen thousand dollars, will do well to examine them. A fine house has lately been erected upon similar plans at Canton, which was dedicated not long since by the State Superintendent.

LOCAL INTELLIGENCE.

Fulton City.— We hear good things of our friend H. S. Hyatt, who has recently been introduced into the Union School of Fulton City, Whiteside county. The school-building of that place is one of more excellence than is generally found in our towns. We are satisfied that the Union Graded School, under the present principal, will vindicate the system in that locality, if he has the coöperation he deserves.

In connection with the above, we hear favorably of the private institution established recently in the same place, under the care of Mr. Covert, for the instruction of young men and boys. We hope to notice both these institutions more favorably hereafter.

Lombard University.— Prof. Standish writes thus cheeringly of this institution, located at Galesburg: "The University is very flourishing as regards students; never more so. The Senior Class numbers 13."

State Natural-History Society.— We have received the first volume of the 'Transactions of the Illinois State Natural-History Society'. It is a neatly-prepared exhibit of the affairs of the Society from its inception, four years ago, until the present time, and reflects credit upon the Secretary, Mr. Wilber, under whose supervision it is edited. Several papers of considerable value are among its contributions. Teachers and others interested in the promotion of Natural History should secure a copy. Address C. D. Wilber, Secretary, Bloomington, Ill.

Hancock County.— The Report of Mr. G. W. Batchelder, School Commissioner of Hancock county, is on our table. We infer that this Commissioner is wide awake to the interests of common schools, from the details compiled as the result of his official labor. The amount of labor indicated in the compilation of itself argues well for his industry and application to his office. There is no office in the public gift in which so much good can be accomplished as the much-neglected Commissionership. We wish every county could or would appreciate the advantages to be derived from the selection of capable, earnest, efficient men for this responsible but ill-paid position. We hoped to see among Mr. Batchelder's items of report the number of copies of educational journals taken by teachers during the past year. We desire that this item shall not be omitted in the next report,

as it will tell whether the teachers of Hancock county are as wide awake as their Commissioner.

The Hancock County Teachers' Association held an Institute at Laharpe, Aug. 27th—30th, 1861, a brief account of which has been furnished us by the Committee, as follows: "Three sessions were held each day: 1st, from 9 A.M. to 12 M.; 2d, from 1½ P.M. to 4½ P.M.; 3d, from 6½ P.M. to 9 P.M. The day was devoted to recitations in Arithmetic, Grammar, Geography, and Elocution; the evenings to discussion of resolutions and to lectures. During the day the exercises were interspersed with vocal and instrumental music. During the evenings the Laharpe Choir favored the large audiences present with many fine pieces of music. About sixty teachers were present during the session. At no former meeting has a more general interest been taken by the teachers and citizens. The Institute is but in its infancy; and we hope at each succeeding meeting a deeper interest will be felt, until it shall be made truly what it is designed to be — a valuable auxiliary to the cause of education."

MONMOUTH SCHOOLS.— The second Quarterly Report for the current school-year, by the Superintendents, Daniel Negley, Esq., and Mrs. L. M. Tucker, to the Mayor and Aldermen of the city of Monmouth, is before us. There are two good points made by Mr. Negley's Report. He shows very clearly that in the matter of economy nothing has been gained by the discontinuance of the public schools for the half of the year. We hoped better things of Monmouth, inasmuch as it is one of the places to which we are accustomed to look for educational progress. The friends there must sustain their preparatory schools if they hope to keep up the good name of their college. These schools are dependent on each other, and any neglect of the one is fraught with mischief to the other.

The second good point we clip from the Report:

Under the present arrangement, you are acting in a double capacity: first, as town officers; second, as school officers. The town officers are elected each year upon some political or side issue, and, as a general thing, the office of school director is lost sight of entirely. This arrangement necessarily places the most responsible of the offices in the back-ground. Would it not be to the interest of the citizens of Monmouth to petition our next Legislature to create an office of Board of Education, part of whom shall serve three or five years, whose duties shall be confined to your schools alone?

We are glad to see this absurdity thus rebuked. There is no more reason why the Mayor and Aldermen should be ex officio the school board than that the poor-master and commissioners of highways should act in the same capacity. In fact, there would be some point in making the poor-master chairman of the board, since the poverty of the schools can only keep them up six months in the year. There has been a good deal of tinkering done in many places, which has been a great detriment to the schools and school systems; and the incorporation of the duties of two offices so incompatible as alderman and school director can produce nothing but mischief to the schools. If the good people of Monmouth will fall back on the general school-law they will, we think, find its provisions amply sufficient for their wants without any more special legislation. We hope our Legislature will refuse, as has been done in at least one State, to make any special legislation for schools. Mischief is usually the result, and that for causes which must be obvious to any one acquainted with the operation of school-laws.

NOTICES OF BOOKS, ETC.

BRYANT & STRATTON'S COMMON-SCHOOL BOOK-KEEPING. Chicago: S. C. Griggs & Co. 1861. Small 8vo. pp. 192. 75 cents.

The High-School edition of this work, published a year ago, is an exhaustive treatise on the science of accounts and its collateral branches, and was prepared especially for a book of reference in counting-houses and for use in High Schools.

The Common-School edition, lately published, does not aim to give an extended analysis of the subject, but to present its practice in a manner so practical that any scholar who uses it will gain a sufficient knowledge of the subject for any of the common purposes of life.

The work contains sixteen entire sets of books, embracing a Retail Merchandise, Wholesale Dry-Goods, Cabinet-ware and Furniture, a Produce, Grocery, and a Gentlemen's Furnishing Business, some of these being prosperous and some adverse in their results, besides many practical hints of which some besides scholars might take notice.

The series, when complete, will consist of three books, and will be far the most satisfactory of any works on this subject of which we have any knowledge.

THE AMERICAN DEBATER. By James N. McElligott, LL.D. Third Edition. New York: Ivison & Phinney. Chicago: S. C. Griggs & Co. pp. 323. $1.00.

This work contains a plain exposition of the principles and practice of public debate; the author giving an account of the qualifications necessary to a good deliberative orator, and the mode of acquiring them; decisions on all the possible questions which can arise in any deliberative assembly; two debates in full, and a dozen in outline, with a series of questions on all possible subjects with references to sources of information; forms of constitutions for debating societies, and the Constitution of the United States, with an index; the whole making a valuable book of reference to any one who aspires to be a good debater, or a text-book for the use of our higher schools or colleges.

SCHOOL-DAYS OF EMINENT MEN. By John Timbs, F. S. A. From the London Edition. Columbus: Follet, Foster & Co. 8vo. pp. 309. $1.00. Sent on receipt of price (postage paid) by S. C. Griggs & Co., Chicago.

We have read this book with much satisfaction, finding a great deal which was new to us. It is divided into two sections. The first sketches the progress of education in England from the reign of Alfred to that of Victoria, commencing, however, with the dark age when knowledge was wrapt in the gloom and mysticism of the Druidical grove, and is historical and biographical. The education of each sovereign is protrayed, and also his early habits and tastes, which so often exercised a powerful influence upon the people. We have an account of the founding of Queen's College, Oxford, Eton, Winchester, Westminster, Rugby, Harrow, and all the other celebrated colleges and schools of England, together with a description of all the educational systems which have been so celebrated in their day.

The second section is devoted to sketches of the early lives — the school and college days — of eminent men who, by their genius, learning, and character, have shed lustre upon their name and country. We have sketches of the birth, boyhood and education of Caxton, Coke, Sidney, Bacon, Crichton, Shakspeare, Matthew Hale, Jeremy Taylor, John Bunyan, Newton, William Penn, Watts, Pope, Wesley, Dr. Johnson, Gray, Burke, Cowper, Warren Hastings, Gibbon, Paley, Burns, Sir Walter Scott, Coleridge, Southey, Lamb, Davy, Stephenson, Byron, Dr. Arnold, and a host of others; and we were astonished to find how much valuable information could be contained in so small a book.

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GEOGRAPHY.*

MY theme is 'as old as the big round world', as vast and fertile. I fancy that its fertility will not be evident at first sight to all. Geography! the name conjures up before many minds only dry definitions; a multitude of names and numbers, painfully mastered and then forgotten; pages of concise, barren descriptions; and colored plates, covered with dots, and crossed by black lines. Such, I must confess, was the image that it presented to me until a short time since, when I first realized that what I had known was only a dry skeleton, and *Geography*, the living study, discovered itself to me in its exhaustless richness. I do not feel now that I must labor to make my subject attractive; but only fear that I may not succeed in presenting its attractions as they appear to my own mind.

I do not claim to be a model teacher of this branch, nor even to have attained to its full comprehension; but only claim to love it sincerely, and view it as of the highest importance. I will present simply the method of teaching it which I believe to be the true method, have carried out to a certain extent, and am carrying out as fast as possible. For my own interest in the study I am much indebted to the suggestions of others, as well as to my efforts to teach it as it should be taught.

It seems to me that no other department of science is so meagrely represented in its text-books as geography. Little else than the mere outline, and that not perfect, is given. The child is led to the portal, and looks within; but a mist is there, and he goes away without any

* An Essay read before the Illinois State Teachers' Association, held at Bloomington, by Miss FANNY MARSHALL, of Quincy, Illinois.

conception of the rich fields that lie beyond, thinking, perhaps, that he had seen all, and having no desire to explore further.

> "These forms of beauty have but been to him
> As is a landscape to a blind man's eye."

It may safely be affirmed that few children have a correct idea of this study. It is looked upon as merely a lower round of the ladder — something that must be acquired in order to mount higher. Older pupils look upon it with a sort of contempt, as something belonging to their childish days, and feel aggrieved if it is hinted that they should pursue it again. Nothing, perhaps, better expresses their feelings than the exclamation of that very 'finished' young lady just returned from boarding-school: "As for *common* things, Arithmetic, Geography, Grammar, and History, thank my stars, I have fagged through them all!"

I am satisfied that geography can be rendered the most interesting of all studies, and is best adapted to awaken the mind, and lead it out into all knowledge. Its field is the world, the *whole* world, in all its aspects and relations. All other sciences can be made to contribute of their fullness to its treasury.

> "There is no form upon our earth
> That bears the mighty Maker's seal,
> But has some charm; to draw this forth
> We need but hearts to feel."

And the teacher of geography needs but the will to gather all these charms about this study. But one must step out from the narrow limit of the text-book, and glean largely from every source.

True, we must have text-books, and, for the want of better, must use those we have; but let them be only auxiliaries, only as guide-boards to the storehouse of knowledge. Let us, then, suppose McNally to be our guide. First comes an outline of Mathematical Geography. Let us not pass those definitions at the end of the time necessary for the pupil simply to commit them, but spend days, or weeks, on them. In giving the first definition, let the class obtain some idea of what is included in geography, and understand that it is this earth upon which they live, real land and water, plant, animal, and man, that they are to study, not words and pictures. Then let them understand the position of the earth, whirling through space; the forces that retain it in its orbit, and bind terrestrial things to its surface. By simple illustrations they may be shown how the earth attained its present shape. The theories of its formation, and preparation for man, will also interest, and awaken thought. Now, when the diame-

ter and circumference are defined, they will hardly fail to ask how the earth is measured; and enough can be told them to satisfy their curiosity. By this time the scholar will scarcely be in danger of imagining the axis to be a stick thrust through the earth, of which the extremities are the poles; but if this is not yet clear, a ball revolved between the thumb and finger, or thrown from the hand, will be a good illustration. Then the revolutions of the earth, the succession of day and night, and of the seasons,—what a field for explanation, with the aid of globe, map, and blackboard, bringing in naturally the tropics, artic circles, and zones. Latitude and longitude scholars are slow in comprehending; but, after it has been carefully explained, in stead of requiring them, as a general thing, to learn the latitude and longitude of localities, let them find these on the map in the class, also the difference of latitude and longitude of places, reducing the degrees to miles; and show them how these differences make difference in climate and time, giving them practical questions.

The 'Map of the World' teems with interest. First is its physical character; and here let us avail ourselves of the researches of Guyot, Mrs. Somerville, and others. Let us note the configurations of the grand divisions, their similarities and differences, and the varieties of surface, affecting the distribution of rain. We may then take the zones, one by one, and investigate each,—the climate, distribution of plants, animals, and races of man; tracing the spread of the human species from its cradle in Asia; observing how climate, surface, and relation of land and water, make the plant, the animal, the man, the civilization of each portion what it is. Even the Frigid Zones may yield abundance of pleasure and profit by descriptions of their wondrous ice-fields and mountains and brilliant skies. We may have some account, by reading or narration, of the explorations of 'Arctic Adventurers'; also of the history, manners, and customs, of the people of Iceland, Greenland, and other northern countries, than which nothing is more interesting. Some of the class may be sent on voyages to different zones, to return and give written accounts, the teacher referring them to the proper sources of information. We will not forget the trade-winds, currents, and all the wonders of the

> "Ocean old, centuries old,
> Strong as youth, and as uncontrolled,
> Pacing, restless, to and fro,
> Up and down the sands of gold."

And here Lieut. Maury will be a good reference. A scholar of any mind will not fail to be sufficiently interested in all these things to learn localities without any difficulty.

The United States should first be examined as a whole pretty thoroughly, striving to get a clear idea of the physique of

> "Our broad land, our sea-like lakes, and mountains
> Piled to the clouds, our rivers overhung
> By forests which have known no other change
> For ages than the budding and the fall
> Of leaves, our valleys lovelier than those
> Which the old poets sang of."

The student should have a distinct image of these in his mind; should see the influence which they have upon our country's national character; should learn its natural resources, its history, and something of its relations to other nations. Of localities all that are unimportant may be omitted (for it can not be best to burden the mind with names to which no definite idea is attached), and we should not pass by any of the others without learning, if possible, something in regard to it which shall make it a reality, and fix it in the memory.

Then we may take each State in the same manner, under all its aspects, making each locality vital with all that we can learn of it. Here is a lake to describe, as Winnipiseogee, or Lake George; and there may be read to the class some traveler's description of it. Goodrich's Pictorial Geography is valuable for this kind of information. On the Hudson we may have Irving's inimitable sketches, made more life-like by those delicate lithographs. Willis's 'White-Mountain Scenery' would associate with that little shaded line in New Hampshire images of grandeur and beauty such as a western child gets no conception of from his geography.

Let us visit salt springs, coal, iron, lead, gold and silver mines, inquiring into the excavation and purification of the minerals.

Especial attention is to be given to cities — their history, advantages and disadvantages of situation, peculiarities of appearance, etc. For instance, New York: learn its surroundings, size, and general plan; and the class will readily comprehend the circumstances which make New York our metropolis — its fine harbor and water boundaries, its command of the entire country west by means of the Hudson river, Erie canal, the lakes, and the Mississippi with its tributaries. The situation of New Orleans, Charleston, and other cities, may be compared with this.

States may be compared, and the causes sought out which give to each its distinctive character. Then we may take the Eastern, Middle, Southern and Western States, and compare them as sections. We should dwell particularly on our own State and town. Let the class draw a map of the latter, learn its boundaries, and give an account of

any objects of interest in the neghborhood, and of the principal kinds of business pursued. We need not entirely neglect our General Government, but learn an outline of it, if necessary reading portions of the Constitution.

In passing to other lands we should follow the same method. What exhaustless treasures of knowledge, delightful knowledge, are to be found in those old countries so rich in historical associations. Every foot of ground speaks fascination to young minds: the exploits of the grim old heroes of the North countries, the ever-varying lights and shades of European history and present existence, the grand monuments and ruins of Egypt and Asia; add to these the homes and works of genius, and all come within our scope. I do not think, as some contend, that history should be separated from geography; half the benefit of each is then lost.

A means of interest and profit to the class is to read from the newspapers short articles that have a bearing upon our study; another is to read from the list of prices-current, questioning as to the nature and sources of the various productions; still another is to have the class bring in specimens of foreign productions that are in common use among us, and form a sort of cabinet for reference.

The class should be thrown as much as possible upon their own efforts for gaining information; but, of course, the teacher must be always ready to supply deficiencies, and may some times prepare a lecture or essay, as upon lakes, or some particularly interesting country, or natural curiosities, or ruins. It is well, also, to assign frequently to different members of the class subjects for written description.

Constant map-drawing is good; maps brought to the class on paper and then some times drawn on the board. It is a sure and pleasant way of fixing outlines and localities.

Poetry need not be excluded. Some of the finest descriptions of scenery are given in this form.

> "Nature hath her hoarded poetry,
> And her hidden spells; and he
> Who is familiar with her mysteries is even as one
> Who, by some secret charm of soul or eye,
> Sees where the springs of living waters lie."

Localities and events may be ever associated in the mind of the pupil with this refining influence, for poets have surrounded almost every spot on our earth with their own bright fancies.

Such a method of teaching geography can not fail to make an interested class; and every teacher knows the importance of this. There will be some dull ones, it is true, a few whose minds seem proof

against all arousing influences; but the majority will be wide awake; they will have a thousand questions to ask, opinions to give, and suggestions to make; dry and difficult lessons will be a rare complaint. I think I am not remarkably enthusiastic in teaching; that is, I have not full confidence in the delightful picture of Young America sitting with open mouth to receive instruction, or submitting meekly his tender mind to be moulded by the gentle hand of his dear teacher; but I have faith in the magic wand of Geography.

It makes, also, an intelligent class. They realize that their own city or village is not the whole world; they have some just ideas of the broad earth which lies beyond the limits of home. Their minds can not fail to expand as they realize more and more of the unlimited fields open for their investigation. They are prepared to listen eagerly and with understanding to the conversation of well-informed people, and when they go out from home they will not pass through new scenes with unobserving or open-mouthed ignorance.

This study will awaken a thirst for all knowledge. Physical Geography, Geology, Natural History, and Botany, display just enough of their charms to tempt the student further. History allures him. He longs to know more of those old nations, living and dead, which lie in the enchanting distance. He must study at leisure the gay panorama of life and manners which has been rapidly passed before. He must unravel the mystery of

> "Those temples, palaces, and piles stupendous,
> Of which the very ruins are tremendous."

Travels and explorations will be sought with avidity. Poetry, even, will have new charms. I esteem the desire for knowledge and the love of healthful reading among the highest benefits of this study, and believe it may be made to supersede the wretched and ruinous taste for very light reading so often acquired, especially by girls.

It is true that such a method of teaching requires labor on the part of the teacher. Unless one is well versed in general knowledge, it will be necessary to make daily preparation for going before the class; but the labor that brings so rich a return is not irksome. It is true, also, that more time is required for a recitation than is possible in most of our common schools, under the existing order of things; but more time is justly due at any rate: a revolution is very desirable; and for teachers to be alive and grow out of these narrow bounds is the surest way to make larger ones necessary.

The question has often been discussed and, like other controverted questions, never decided, which study should take the precedence in

a child's education. I would express myself upon it by submitting my views of teaching geography. Is not the first step in a course of instruction to draw out the mind, awaken in it a thirst for knowledge, and give it a perception of what is to be learned? Arithmetic and grammar are too abstract, too arbitrary, for the still feeble and dormant mind — they are for discipline. First lead the young child out into the beautiful fields of Nature, to breathe her vitalizing atmosphere, until his mind unfolds and glows with a desire for action; then subject him to the strengthening discipline which man has contrived.

COMMON SCHOOLS.*

SOME years since it was my good fortune to visit a school in Jacksonville, where the quiet earnestness of the principal inspired me with new zeal for my own work. Years afterward I listened to him again, in our own Association, and received a new inspiration. I stand here to-night to speak for him, your honored State Superintendent of Public Instruction, Mr. Bateman. It is because that he is not able to speak for himself, and I feel that I should be unworthy the name of friend did I fail to accept the invitation so kindly extended by him and by the officers of your Association. At such a time as this, when the thoughts of all are upon the battle-field, and when the hearts of many may be wrung with anguish lest some of ours may have fallen, it may seem out of place to allude to a subject so trite as this matter of common schools. I remember, when a boy, of finding, in an old book with quaint letters, the legend of the dragon's teeth sown by Cadmus, which sprang up into armed men. At Fort Sumter the dragon's teeth were sown, and instantly there sprang to arms a quarter of a million of men, and the call of the President was more than answered. That number has now been doubled. Muscle and money have been called for, and muscle and money have been given. But our country wants something without which money and muscle are useless, and worse than useless; and we are called upon to furnish the brain and heart that our country needs. Perhaps we may be able to derive some lessons from the war. When the country recovered from the news of the disastrous defeat at Bull Run, the first thing was to ascertain

* Abstract of the Lecture of Hon. J. L. PICKARD, of Wisconsin, at the meeting of the State Teachers' Association, at Bloomington, Dec. 27th, 1861. Reported for the *Teacher*, by S. A. BRIGGS, Associate Editor.

whether our leaders were competent men. We have often been defeated in our projects; and is it not well enough for us to inquire if our officers have been competent men, men who had brain enough and heart enough to work to the best advantage?

Back upon the shores of New England were planted, side by side, the church and the school-house. We have often attempted to do the same; but there is one thing we have some times forgotten — the church and school-house stood close by the farms and the work-shops. Our forefathers and foremothers were industrious men and women.

In the early days of Massachusetts colony, an order was promulgated that some work should be done by all members of the family: a pass-book was provided, in which an account was kept of all the work done by each child and every other member of the family; and if any were unwilling to work, a work-house was provided for them.

We have forgotten this in our mad haste to be rich. The thinking man must labor, and the laboring man must think, or the spirit of our institutions dies out, and leaves nothing but the *name* of liberty here. In the South a certain portion of the people have been educated to think, and not to act; and we have the result in this rebellion. Now, the strong arm of the laboring, thinking man must be made to put that down.

In our northern army are men who think for themselves, as we can see by the numerous private letters which have found their way into print, and who, when the time comes, will act for themselves.

Wherever you see that starry banner [pointing to the flag which hung over the stage], you will see it protected only as men are men who think for themselves and act for themselves. As educational men, we must have more work, more labor in the proper direction. In the few years past we have run off into extravagances. If we have crammed the head with book-knowledge, we have thought what we have done was sufficient. We have too many men in the land who do not understand how to use what they have learned. We want men who shall understand what they have learned, and be able to think for themselves in any possible direction.

We have too many schools that are taught as if the scholars were so many jugs: one man pours in a little arithmetic, another a little astronomy, a third a little geography, a fourth a little grammar, and so on, until at last the parents come and take the jugs home as educated men and women. And many times these jugs don't know enough to tip over and let what is in them run out. [Laughter.]

The lecturer related the anecdote of the preacher who, having exchanged with a brother, in harnessing the horse put the collar on

wrong side up, and, as a matter of course, attracted the ridicule of the congregation, and spoiled the effect of his sermon. He knew enough of rhetoric, but could not harness a horse. In contrast to this was the case of the grandchild of Dr. Chalmers, who, upon being told that the moon was made of green cheese, sought information of her grandfather, who referred her to the Bible. Some time after she came running to him telling him she found out that it was not the case. When the doctor asked her how she knew, she replied that her Bible told her that the moon was made before cows.

I do not object to book-knowledge, but I do object to having a person fill himself up with book-knowledge, and shut himself out from every thing else. A man must not only have a brain and heart, but he must know how to use them.

The high school and the common school are parts of the same system. The one is the head, the other the heart. One is the branches, the other the root. Our high schools are directly dependent on our common schools. Three-fourths of our pupils without their common school would have no means of education whatever. And then you may educate your children at home, by your own doors, where you will not be obliged to separate them from those genial influences by which you can only there surround them.

The common school stands out as an Americanizing institution. Wherever it is, it teaches order, strength, and perhaps all that kind of equality which was spoken of last night as the right of freemen. Our common schools spread over the world a true estimate of the worth of those principles which underlie our institutions, without which they would be worthless. Our schools are especially Americanizing to those who come among us from other lands. The mingling of the races is one of the means of developing a very high order of civilization. There are good things in other nationalities than Anglo-Saxon. This type of civilization can not be gained except through the Americanizing these nationalities, which can best be done through the common school. Our brethren from foreign lands will not seek these privileges for themselves; but when offered they freely use them, and become the fastest friends of our institutions. Through this process we may hope to bring out a race which shall have all the qualities which are good, with few of the bad.

But, fellow teachers, the public look to you to make the common school what it ought to be. If you are as ready to battle ignorance and superstition as your brothers who are away from home are, you may find growing up in your own State something which will be the best means of securing the blessings of these free institutions.

I have found in Wisconsin schools where the scholars did not know the names of the months, or the days of the week, or the order in which they come. We have, most of us, seen educated men who did not know on which side of a cow to get to milk, or how to put a bridle on a horse; and there are young ladies who can finger the keys of a piano beautifully, who do n't know enough to work their fingers through the dough which is to make them bread. We find teachers who do not know how to teach children about things of every-day life. We want teachers that will not feel that when they have a certificate from the State Superintendent they are willing to sit down and say they have reached the summit of their profession. Every live teacher must advance as long as he lives. He may never be satisfied with his attainments until he comes up into the presence of the Great Teacher, and says 'I am satisfied, for I have seen thy likeness'. I remember the boy who marked the last word he spelled at the close of his winter's school, which was *booby*. And each successive winter he began the book and came around to the same word. There are those teaching who pass round, year after year, the regular circle of their work, never deviating, coming always to the same point, and that point is always a *booby*. [Laughter.]

Another thing is necessary: that a teacher shall be always master of himself. Teachers will allow themselves to administer with their lips a severe castigation to their pupils. A lady teacher — pardon me, a *female* teacher of the turbulent kind — went into a school where she found great difficulty in securing the attention of the scholars. One little girl particularly resisted all her loud threats and punishments. One day she noticed her paying the closest attention. Throughout a long lecture the little girl did not turn her eyes from her face, and the teacher thought she had conquered. At last, in the midst of the tedious harangue, when the countenance of the little girl showed the greatest animation, she suddenly broke out, '*Oh, Miss Jane, you do n't move your upper jaw one bit*'. She had n't heard a word the teacher had been saying. This is all the good scolding does in schools any where. Be very firm, very sincere, very earnest, and let kindness mark every word. Be not betrayed into a spirit of fault-finding.

"A word in love expressed,
A motion, or a tear,
Has often healed a heart depressed,
And made a friend sincere.

"A look has crushed to earth
Full many a budding flower,

Which, had a smile but owned its birth,
Would bless life's darkest hour.

"'T is not an idle thing
For one to look or speak;
The face we wear, the words we bring,
A heart may heal or break."

You must remember the importance of being kind yourselves and cultivating kindness in your pupils. The little ones are nervous and irritable, and they must be reproved in kindness. 'I did n't hwis 'l, thir, it hwis 'ld its thelf' is characteristic of childhood. Do n't suppress this energy; take hold of it and cultivate it, and bring it out into something beautiful, which shall be an ornament to the child, and an ornament to the world. *Never forget that you were a child once.*

"He who checks a child in terror,
Stops its play, or stills its song,
Not alone commits an error,
But a grievous *moral wrong.*

"Give it play, and never fear it;
Active life is no defect;
Never, never, break its spirit;
Curb it only to direct.

"Would you stop the flowing river?
Think you it would cease to flow?
Onward it must run for ever;
Better teach it *where* to go."

Look out that you enter into a full sympathy with the children you have to teach, and that you direct that sympathy in the right direction. You are standing in a very responsible situation. You are standing before little hearts, every one of which will receive an impression which will remain there as long as they live. Bear in mind that your habits of mind and thought, and your personal habits, should make those better who come under their influence. In yonder flag you have the emblems of love, purity, and fidelity. It speaks eloquently to every man who looks upon it. The stars say to us that our course should ever be upward, and the mingling of the colors seems to say that love should rest upon purity as its basis, and be willing to trust even to sacrifice. But there is a better lesson than this. Those stars are held together by a central star, a controlling sun, a better star than these, and it is the 'Star of Bethlehem'. And in the red we have an emblem of a sacrifice nobler than any human sacrifice, that of the Great Teacher, whom we should all try to imitate.

Teachers some times get discouraged — very much discouraged. Let them derive a lesson from our own rich prairie soil. After the fires have ceased to run over it there comes a growth of underbrush, from which come those noble groves of which we are so proud. And yet, if you dig down, you will find no seed from which these groves must come. As teachers, you sow seed broadcast. You may dig down in after years and fail to find a single little seed; but you may be sure that there is a Power above that will protect that seed, and as soon as the fires of ignorance are kept down will cause it to spring forth into fruition.

There is a beautiful German allegory, which I will give in closing. An old man who had been useful all his days had finally ceased to be able to do any thing, and had been turned out to die. As he was journeying along, he sat down, weary and sorrowful, by the roadside, and slept. And as he slept a number of little shining spirits bending over him touched his brow, soothing him by their gentle words and caresses; and, beckoning him to rise, they said "We are the spirits of those you directed aright in your early work. Lift yourself up, and be joyful in the work you have done." And the old man rose and cheerfully went on his way. Fellow teachers: learn to labor, and be willing to wait for the result of your toil.

K E Y S

Will not every teacher grant the truth of the proposition that that kind of instruction in our schools is best which best fits for the practical realities of life? If so, what shadow of sound reason can be given for the frequent — almost universal — use of 'keys' in school exercises? I refer to answers in Arithmetic and Algebra, whether scattered through the book or in separate books called 'keys', and also include answers to grammatical and rhetorical exercises, full demonstrations in Geometry, initials in Geography, and every kind of 'pony' in translations.

Is not the direct, inevitable, *tendency* of all these to make school-work the most unpractical possible? Is the object in solving an arithmetical problem in school to obtain the answer, or to acquire that mental discipline which prepares the pupil to solve all similar problems, at the same time that it will aid him to do any kind of intellectual work? And will not every teacher agree that the universal prac-

tice of those scholars who are accustomed to work in the usual way, with the answers at hand, is to commence upon a question without a moment's thought, to work *without thought*, as rapidly as possible, until it is thought that the desired figures should appear; then, if the 'answer' should be right, to erase the work, *without thought*, or if it should be wrong, to erase the work just as quickly, and guess again? What single benefit can follow such a course of teaching? On the other hand, is it possible to adopt a course whereby one would be likely to learn less of the matter in hand, or to acquire worse mental habits? Besides, is not the time spent by every thorough, conscientious teacher to prevent an improper use of 'keys' many times as much as he can in any way gain by them? I conceive that a part of the evil would still remain in most of our arithmetics, even if the answers were omitted, from the fact that almost all the examples are classified and arranged under 'rules'. Why not give a few examples of each great class, fully wrought and illustrated, in their proper places, and then place all the rest in the form of 'Miscellaneous Examples', just as the pupil will find them in life, except that a hint might occasionally be added? And are not the answers quite as useless and as injurious in any other of the above-mentioned subjects as in Arithmetic? Why should every demonstration in Geometry be fully written out, any more than every solution in Arithmetic? Does some one object that it would be an endless task to 'go through' without these aids? My very simple friend, what is the object of school-going? Is it to 'go through the books', or to acquire mental power, and the skill to use it practically and certainly? But, how about the 'going through'; in which case is the most progress made in this direction? Is it when much ground is passed over, but so blindly and imperfectly that the work must be repeated the next term, and the next term after, or when half the ground is traversed, but the work so thoroughly done as to stand for all time?

May not 'keys' be made 'for teachers only'? Who ever knew such books to be *used* by 'teachers only'? But suppose they could be: Where is the teacher who can not afford, the first time he passes through a book, to perform all the exercises, and preserve his results? And is it not true that this work is frequently quite as valuable to the teacher as to the scholar? Do you object that the teacher may not be able to arrive at a correct result always? Suppose he is not; suppose teacher and scholar are both totally wrong, one time in twenty: Is it not better to be intelligently right nineteen-twentieths of the time, and to be thoughtfully wrong for the other twentieth, than to be blindly right all the time?

Fellow teachers, are you disposed to answer the above questions as I

am? Or do reasons for the use of 'keys', other than those I have met above, weigh upon your minds? If so, state them in the next number of the *Teacher*. But if we agree in this matter, shall we not labor earnestly to remove one of the greatest obstacles to the work of the real teacher? When three-fourths of the intelligent teachers who use a book actively discourage the use of answers, they will no longer be published. T.

THE CENSUS OF ILLINOIS.

It will be some time before all our geographies and text-books get the results of the new census; and meanwhile it will be convenient to have the census of our own State on record in the *Teacher*. We give it as published in the *Tribune Almanac:*

Adams	41,323	*Brought forward,*	582,757	*Bro't forward,*	1,150,338
Alexander	4,707	Hardin	3,748	Morgan	22,112
Bond	9,814	Henderson	9,501	Moultrie	6,385
Boone	11,678	Henry	20,661	Ogle	22,887
Brown	9,938	Iroquois	12,324	Peoria	36,600
Bureau	26,426	Jackson	9,589	Perry	9,552
Calhoun	5,145	Jasper	8,372	Piatt	6,127
Carroll	11,733	Jefferson	12,965	Pike	27,249
Cass	11,325	Jersey	12,053	Pope	6,742
Champaign	14,628	Jo Daviess	27,277	Pulaski	3,950
Christian	10,493	Johnson	9,342	Putnam	5,587
Clark	14,987	Kane	30,058	Randolph	17,205
Clay	9,336	Kankakee	15,416	Richland	9,711
Clinton	10,941	Kendall	13,074	Rock Island	21,005
Coles	14,201	Knox	28,663	St. Clair	37,694
*Cook	144,957	Lake	18,256	Saline	9,331
Crawford	11,551	Lasalle	48,332	Sangamon	32,272
Cumberland	8,311	Lawrence	9,214	Schuyler	14,685
DeKalb	19,086	Lee	17,651	Scott	9,070
DeWitt	10,819	Livingston	11,638	Shelby	14,635
Douglas	7,140	Logan	14,275	Stark	9,004
Du Page	14,701	McDonough	20,069	Stephenson	25,113
Edgar	16,925	McHenry	22,088	Tazewell	21,471
Edwards	5,414	McLean	28,746	Union	11,182
Effingham	7,816	Macon	13,735	Vermilion	19,801
Fayette	11,189	Macoupin	24,603	Wabash	7,312
Ford	1,979	Madison	31,252	Warren	18,336
Franklin	9,393	Marion	12,733	Washington	13,731
Fulton	33,299	Marshall	13,437	Wayne	12,223
Gallatin	8,054	Mason	10,933	White	12,403
Greene	16,093	Massac	6,214	Whiteside	18,740
Grundy	10,379	Menard	9,596	Will	29,321
Hamilton	9,915	Mercer	15,042	Williamson	12,205
Hancock	29,061	Monroe	12,832	Winnebago	24,492
	582,757	Montgomery	13,892	Woodford	13,282
			1,150,338	Total	1,711,753

*City of Chicago, 109,263

THE GREAT BELL ROLAND.

I.

Toll! Roland, toll!
High in St. Bavon's tower,
At midnight hour,
The great bell Roland spoke:
And all who slept in Ghent awoke.
What meant its iron stroke?
Why caught each man his blade?
Why the hot haste he made?
Why echoed every street
With tramp of thronging feet—
All flying to the city's wall?
It was the call,
Known well to all,
That Freedom stood in peril of some foe:
And even timid hearts grew bold
Whenever Roland tolled,
And every hand a sword could hold;—
For men
Were patriots then,
Three hundred years ago!

II.

Toll! Roland, toll!
Bell never yet was hung
Between whose lips there swung
So true and brave a tongue!
If men be patriots still,
At thy first sound
True hearts will bound,
Great souls will thrill!
Then toll, and wake the test
In each man's breast,
And let him stand confessed.

III.

Toll! Roland, toll!—
Not in St. Bavon's tower,
At midnight hour,
Nor by the Scheldt, nor far-off Zuyder Zee,—
But here—this side the sea!
And here, in broad, bright day,
Toll! Roland, toll!

For not by night awaits
A brave foe at the gates.
But treason stalks abroad — inside! at noon!
Toll! thy alarm is not too soon!
To arms! Ring out the Leader's call!
Reëcho it from East to West,
Till every dauntless breast
Swell beneath plume and crest!
Toll! Roland, toll!
What tears can widows weep
Less bitter than when brave men fall?
Toll! Roland, toll!
Till cottager from cottage-wall
Snatch pouch and powder-horn and gun,
The heritage of sire to son
Ere half of Freedom's work was done!
Toll! Roland, toll!
Till son, in memory of his sire,
Once more shall load and fire!
Toll! Roland, toll!
Till volunteers find out the art
Of aiming at a traitor's heart!

IV.

Toll! Roland, toll!
St. Bavon's stately tower
Stands to this hour,
And by its side stands Freedom yet in Ghent;
For when the bells now ring
Men shout '*God save the King!*'
Until the air is rent.
Amen! So let it be;
For a true king is he
Who keeps his people free!
Toll! Roland, toll!
This side the sea!
No longer they, but we,
Have now such need of thee!
Toll! Roland, toll!
And let thy iron throat
Ring out its warning note
Till Freedom's perils be outbraved
And Freedom's flag, wherever waved,
Shall overshadow none enslaved!
Toll! till from either ocean's strand
Brave men shall clasp each other's hand
And shout 'God save our native land!'
And love the land which God hath saved!
Toll! Roland, toll!

N. Y. Independent.

A SKETCH OF THE HISTORY OF EDUCATION.*

Mr. Wells commenced by stating that a special educational revival occurred in this country about forty years since. *The Academician*, an able educational and literary periodical, published in New York in 1818 by Albert and John W. Picket, was both the harbinger and embodiment of important educational reforms.

Mrs. Willard's *Plan for Improving Female Education*, which appeared in 1819, has since been most worthily executed, not merely at Troy under her own direction, but in all the Northern States of the Union.

In 1821 appeared *Colburn's First Lessons in Arithmetic.* This was the most important single step of educational progress ever taken in this country; and it is hardly too much to say that its influence has been felt in every school in the land. More than 2,000,000 copies of this work have been sold, and the sale still continues at the rate of about 100,000 copies a year in this country, and 50,000 copies in Great Britain. It has been translated into most of the languages of Europe, and into several languages in Asia.

In 1823 Mr. William Russell wrote the first article now in print on the subject of Normal Schools in this country; and, so far as is known, is entitled to the credit of being the first to move in this matter.

In 1824 and 1825 we reached a bright period. James G. Carter, of Massachusetts, whose name is now canonized in our educational calendar, wrote a series of articles published in Boston, and Mr. Gallaudet a series published in Hartford. To these we are more indebted than to any other means for the influences that prepared the way for the establishment of Normal Schools.

In 1826 Mr. Russell established the *Journal of Education*, the first educational periodical devoted exclusively to educational matters. In 1830 the first Teachers' Seminary was established at Andover, by S. R. Hall, who also published the first book on school-teaching (consisting of a series of lectures), which was at that time almost the sum-total of the teacher's educational library. The Female Seminary established at Ipswich, Mass., about this time by Miss Z. P. Grant exerted an important influence in elevating the standard of female education.

* Abstract of the Address delivered by President Wells at the Annual Meeting of the Illinois State Teachers' Association at Bloomington, Dec. 26th, 1861. Reported by S. A. Briggs, Associate Editor.

In 1830 Mr. William C. Woodbridge took charge of the *Journal of Education*, under the title of '*Annals of Education*'. In his hands the work attained a high reputation, both in this country and in England; and no educational library can now be regarded as complete that does not embrace the early volumes of the Annals of Education. Many of the articles from the editor's pen — especially those written during his sojourn in Switzerland — were far in the advance of the age.

The first Association of Teachers in the United States, of which we have any knowledge, was formed at Middletown, Ct., as early as 1799, under the title of the *School Association of Middlesex County*. It owed its organization chiefly to the efforts of its first President, Rev. Wm. Woodbridge, instructor of a female school in Middletown, who had even then introduced many plans and methods of instruction which are now generally regarded as recent improvements. Its professed objects were 'to promote a systematic course of school education; to secure the inculcation of moral and religious principles in the schools; and to elevate the character and qualifications of teachers'.

In 1830 the *American Institute of Instruction* was established at Boston, under the auspices of Messrs. J. G. Carter, William B. Calhoun, G. B. Emerson, F. Wayland, T. H. Gallaudet, W. C. Woodbridge, G. F. Thayer, and others.

Mr. Wells, when he began to have some idea of teaching, visited one of its sessions in the Boston State-House, in 1834, and heard there a young man, Jeremiah Blanchard (lately President of Knox College, now of Wheaton), take part in one of the discussions. He was particularly interested in Mr. Blanchard's great command of language, and still distinctly remembers his happy use of the word *versatility* on that occasion. The Association has never failed to send out a volume of lectures each year since that time. This is now the most valuable series of educational lectures in the language.

The *Essex County Association*, established in 1830, was the first permanent County Association in existence, and it is the one from which the call for the Massachusetts State Association originated. It was in this Association that David P. Page first gave promise of his distinguished career as an educator.

But it was not in the East alone — said the speaker — that early efforts were made to advance the interests of popular education. In 1831 a general convention of teachers of the Western States was called at Cincinnati, which resulted in the organization of the *Western College of Professional Teachers*. The annual meetings of this body were well sustained for a period of about ten years, and the proceedings were published in a series of volumes as large as those issued by

the American Institute of Instruction. Among the prominent educators engaged in this enterprise were Albert Picket, Samuel Lewis, W. H. McGuffey, T. M. Post, J. M. Sturtevant, J. L. Van Doren, and C. E. Stowe.

The next point of special interest is the establishment of Teachers' Institutes. The first of these was at Hartford, Conn., in 1839, and was conducted by the Hon. Henry Barnard, who originated it, assisted by Mr. T. L. Wright, Mr. Gallaudet, and others. A Mr. Sweet lays claim to having held Institutes in the State of New York at an earlier date.

[Mr. Johonnot explained that Mr. Sweet's meetings, even if they were at an earlier date, which is in doubt, were not Institutes, and that the credit is due to Mr. Barnard.]

The first Normal School of this country was opened at Lexington, Mass., in 1839 [Mr. Fitch gave the number of pupils in the first class as 7]; and this was the germ of our State Normal Schools. Two other Normal Schools were soon established in different parts of the State, and friends rallied around them; but, as compared with the efforts in other States at this time, those were very small beginnings.

In 1844 the friends in New York asked an appropriation for five years. The whole matter was an experiment. They came to Massachusetts, to Mr. Mann, to find who was the man to take that institution and not fail, and limit the experiment to five years. Mr. David P. Page was finally selected. In Boston, when they parted, Mr. Mann said "You must succeed or die." "I will," said Mr. Page. He did both, and placed himself where we can say he was the ARNOLD of America. It cost him his life, and he established a school that will never die.

Normal Schools are no longer an experiment in this country. No enlightened community will ever again be willing to dispense with the professional education of teachers. We may boast a little here in Bloomington, which contains the best Normal-School building in America. It is worthy of observation that the Normal Schools and State Agencies of the Western States have been more indebted to the efforts of practical teachers than those of the Eastern States. In Ohio the teachers did not wait as they did in Massachusetts to get an appropriation from the State. They assessed themselves to sustain their agent, that same Lorin Andrews who has just gone to his grave — another canonized name; and in our own State our Normal University had its origin in *this* Association, and I look upon it as a bright point in our history that the teachers of the State went to the Legislature with petitions for its establishment. The progress of Normal instruction among us has been like the rising tide. There have always been those who doubted its value. Some have opposed Normal Schools

with the best motives and intentions; some through caprice; some through jealousy and envy. It was only two years since that the appropriation in Massachusetts for supporting the collateral State Agency was withheld; but another year restored it with increased confidence in its efficacy and importance. So it has been with every effort to stay the progress of Normal instruction: the wave has some times seemed to recede, but it has been only to return stronger and fuller than before.

We received our first ideas of Normal Schools from Europe. In some respects we have improved upon our models. This has been said of us, more than once, by gentlemen from the Continent.

In 1845 the State Associations of New York and Massachusetts were organized.

There have been three eras in the history of corporal punishment. The first was when whipping was the order of the day, when scholars went to school to study the three Rs and be whipped; the second was marked by the sentiment that whipping was never necessary, and a necessity was created for it by the very fact that pupils were sent from home with the idea that they should not be punished, and directed not submit to it.

The Massachusetts Association came together at Worcester to discuss the matter and give, in a series of resolutions, their opinion. These resolutions had an important influence in putting aside both extremes. We have now reached a period when we do not ask the question whether corporal punishment shall be dispensed with. The question is 'How can it be reduced to the lowest possible amount?' Not to say we will not have any punishment, but to labor to reduce the amount to the lowest possible quantity.

While we were thus laboring in these several fields of educational improvement, England and other European countries were equally active in other departments. Pestalozzi, of Switzerland, was particularly distinguished for his success in improving primary methods of instruction. Dr. Mayo, of England, in 1818 made a casual visit to the school of Pestalozzi, and became so much interested in what he there saw that his visit was extended to several months. Enriched with the fruits of these observations and his own reflections upon them, he returned to London and established a school for the illustration of improved primary methods of teaching. This institution, under the auspices of the Home and Colonial School Society, has not only sent out several hundred of the best primary teachers in Great Britain, but it has also given to the world an invaluable series of volumes on object-teaching and other branches of oral instruction.

Similar methods of instruction were strongly recommended in this country as early as 1830, by Carter, Gallaudet, Woodbridge, and others; but it has required more than thirty years to secure even a partial introduction of them in schools. It must, however, be admitted that active educators are at length fully awake to the importance of the subject; and this truly natural and philosophical system of object-teaching is rapidly finding its appropriate place in every well-digested course of elementary instruction. Barnard's *Object Teaching*, which embraces a reprint of some of the best English works on this subject, did not appear till the demand for this kind of assistance had become urgent. Calkins's *Object Lessons*, the first original work of the kind in this country, was specially called for before it appeared; and the forthcoming works of Welch, and Philbrick, and Cowdery, and Willson, on Object Teaching and kindred subjects, will all be cordially welcomed by our primary schools. The danger now is that unskillful teachers will rush too fast and too far with it; or, rather, that they will fail to appreciate its true character and its proper place in a systematic course of instruction, and that the system itself will suffer, not from its legitimate use, but from its abuse.

The city that has given the most attention to object-teaching is Oswego, N.Y. Through the indefatigable efforts of the Secretary of the Board of Education, E. A. Sheldon, Esq., the Pestalozzian system was introduced into all the primary schools of that city several years since, and books containing the Graded Course of the Home and Colonial School Society were imported for the use of the teachers. About one year ago the Board of Education induced Miss Jones, who has for many years been connected with the Home in London, to come to Oswego and devote a year to the education of primary teachers for the city, and teachers from other places who might be disposed to join the class. The effort has been attended with such success that the Board have secured the services of Miss Jones for another year, and opportunity is still afforded for teachers from other States to join the class.

Mr. Wells said he had intended to speak of Barnard's *Journal of Education*, the most comprehensive and valuable educational journal in existence, and of the numerous State journals; of the successful establishment of free schools in this country without the introduction of sectarian influences, as compared with similar and less successful efforts in Great Britain; of the introduction of physical exercises into schools, and the practice of dismissing the younger class before the close of the regular school-sessions; but time would not permit. He had also designed to call attention to one or two weak points in our public-school system, but must pass them.

In conclusion he said: Ladies and Gentlemen of the Association, I congratulate you on the happy auspices under which we meet to-day, notwithstanding the dark clouds which now hang over our country. The children must be educated. We must train the intellect, the heart, the will. Children must be taught in time to yield to rightful and wholesome authority. Then only are they qualified ever to rule. If these lessons had been thoroughly taught in all the schools of the Union, it is not too much to say that we should have escaped the terrible visitation of civil war that now rests upon us.

OUR CRUEL TREATMENT AT SCHOOL.

We often hear the remark made—Such a person is a good teacher, but he can not govern his scholars. Now, we think there are some things which can not properly be separated. We do not call a man a good father simply because he provides for the temporal wants of his child; all that we could say of such a man would be—he is a good provider. So in regard to a teacher: we do not consider any man a good teacher, let his knowledge be as great as it may, and his method of imparting it the best that could be attained, if he fails in governing his pupils, in bringing them to understand that in the school-room his word is law.

If by education we meant only the intellectual training of our children, we might not consider the government of a school a matter of such vital importance as we do when we give the term its true signification, and understand it as relating as much to moral as to mental culture. The separating of these ideas, which should always be joined together, is one among many reasons why so many teachers fail in government.

Another reason of failure is timidity, fear of public opinion. We know that on this subject public opinion is not generally right; but we do not expect it to be right until teachers understand that they must make it so. This we know can be done, for we have seen it done: we have known at least one school in which it was done,—the teacher having to contend not only with scholars that had been accustomed to do as they pleased, but with the ignorance and prejudices of the parents: and we are willing to risk the assertion that the teacher who is determined to govern his scholars by 'moral suasion' if possible, but if not possible according to Solomon's method, will have less

difficulty than the one who suffers his scholars to see his weakness and their own strength. With the first the difficulty will be over as soon as the pupils understand fully *that they must obey*, and, as a general thing, a few cases of *decided* discipline will settle the matter; but with the other it is but one weary struggle from day to day, in which nothing is effected but the making of outlaws.

We wish that teachers understood their business better in this respect than they generally do. We tremble for our children when we hear them relate their school-difficulties with all the airs of a conqueror, for conqueror in very many, indeed in most cases, they are. We tremble when we hear a child of fourteen assert that the president of the college where he attends does not dare to assert his authority, because the students would rise in rebellion. We can not believe that good citizens can be made of children who are accustomed to rule their parents at home and their teachers at school. We have spoken of the ignorance and prejudice of parents, and we are well aware that both have to be contended with, and that it requires both judgment and moral courage to do this successfully.

There is a strong manifestation of the perversity of human nature in the way in which most parents act in regard to school punishment. They know that their children are habitually disobedient at home, yet, from pride or false sympathy, they are unwilling to have them punished in school. So strong is this feeling that our veracity has been questioned when we have said that we would not be willing to send our children to a school where they would not be punished if they deserved it.

Although the matter of school-government belongs mainly to the teacher, his labor may either be lightened or made heavier by the course which the parents pursue. If children (young ladies and gentlemen, as they are called now-a-days) understand that the rule of their parents is to uphold the teacher in maintaining order in the school-room, and that their sympathies are with the teacher as well as with themselves, they will be careful in speaking of their school-difficulties.

We remember very well the first and last time we undertook to 'secesh' in school. We wish the rebellion of Jeff. Davis and his crew could be quashed as readily and effectually as ours was by the good sense of our father. We can not help laughing after twenty years to think what an awful passion we were in. Whipped! Yes, and whipped before the whole school, and when we did not deserve it, either. Well, she would see whether we came back to school again! So we gathered up our books in high dudgeon, and went home, determined

to enlist our mother's sympathies; and then Miss G. would see whether she could whip us for nothing. But alas!

"The best-laid schemes o' mice and men
Gang aft a-gley";

for, as ill or good fortune would have it, we found our mother had gone from home, and the first person we stumbled against in the hight of our passion was our father. Now, we knew enough of his ridiculous sympathy for teachers to be certain that he would sift the matter, and we would have preferred making our complaint to our mother, as we meant to do: we knew very well that she had never taught school; but, as we said, she was from home, and, as we could not conceal the fact that something was the matter, the whole story came out.

We can see as if it were to-day the kind, gentle father as he listened to our story; indeed, we began to feel as though it was not such a misfortune, after all, to have met him. He certainly thought we were right, and we even began to feel triumphant. Upon the whole, it did not make so much difference, after all, that mother was gone. Well, we finished our story amid sobs and tears; and when it was done father quietly took his hat and left the house. Giving us time to cool down and eat our dinner, he went to Miss G. and heard her side of the story; and when he came back he said "You will go back to school this afternoon and submit to your teacher, as I have directed her to punish you until you do."

"Oh, what a fall was there, my countrymen!" What did we do? Why, went back and submitted, as any child would do in like circumstances. Was n't as spunky as children are now? Yes, we were just as spunky, and had just as much of 'old Adam' in us; but the 'powers that be' were against us, and what settled the matter was just this, the authority of parents was not opposed to the authority of teachers.

We are well satisfied that if parents would, in this matter, coöperate with teachers, there would be less of that behavior in school which is so disgraceful alike to teacher and scholar. A MOTHER.

It is difficult to say which is the greater defect in a parent — strictness and firmness in his family without feeling and affection, or feeling and affection without strictness and firmness. Under the one bad system the children are apt to become slaves or hypocrites; under the other tyrants or rebels. But true love is always firm, and true firmness is always love.

UNION GRADED SCHOOLS.

We propose to examine the principles which underlie the system of Union Graded Schools, and ascertain wherein its superior excellence may be found. Were we to judge of the merits of this system from many schools which claim to illustrate its leading features, we fear our estimate of its value would not be very exalted; and were we to take the evidence of its supposed workings in many places where it has been introduced, we would be led to doubt whether the plan adopted could be really dignified by applying the term SYSTEM to it.

There are fashions in education as well as in dress and living, and the latter are scarcely more imperative than the former. It is nearly 'as well to be out of the world as out of the fashion'; and this proverb is applicable to teachers and schools almost as much as to the cut of our coats and the quality of our dresses. There is, however, an elegant, cultivated taste which recognizes certain principles of form, color and material as necessary to an elegant dress, and understands its adaptation to the size form and complexion of the wearer. There is another taste which copies blindly whatever is published as the mode, without reference to its fitness, or appreciation of the incongruities which arise from its misapplication. The esthetics of dress is a science which is affected by many, but which comparatively few attain.

The system of Union Graded Schools has received the highest encomiums from the most respected educational authorities in the land. So extensively has the opinion of its excellence and adaptation to the educational wants of many communities prevailed, that it would be almost an unpardonable presumption to question the reality of its high merit in every particular. This system has been prescribed as the great panacea for every educational disorder,—a sovereign remedy—warranted to cure without fail in every case. Such strong recommendations from such sources could not fail to make these schools *fashionable* in a high degree. They became 'the rage'. Every town competing with every other town and city must organize its system of Graded Schools. School-houses were built, appliances furnished; all the material aid was given which the greatest educational enthusiasm could supply. The people were led to expect great things from a plan so excellent—so superior to every thing heretofore devised; and they often waited impatiently for the school be in operation. The 'royal road to learning' was here opened up to all, and of

course it was expected that such royal facilities would immediately exhibit royal progress. But, alas for human expectations! when the children, teachers and directors were collected to take up their line of march, the jostling, jarring, jolting, jumbling confusion, contrary to all promises and expectations, astonished and alarmed. It was evident that 'something was loose'.

Some communities were in the predicament of the enthusiastic farmer who conceived that he had found a most eligible site for a wind-mill upon the top of a neighboring hill. After much labor the mill was erected and the sails put in motion. It worked like a charm. A constant breeze on the elevated point gave assurance that *power* should never be wanted, and of course, that important question settled, the owner had only to wait till the wheat should arrive that the success might be demonstrated. After much patient waiting, a practical difficulty became distressingly apparent — the mill was built so high, and the access to it was so difficult, that no one could afford to take his grain for a grist; and so a very fine mill was rendered useless by the neglect of *one of the conditions absolutely necessary to its success.*

There are many Union Graded Schools which have failed to retain the favorable impression made at their inception, because *some of the conditions absolutely necessary to their success were wanting.* Such schools must not be expected to realize great results unless the principles on which they are based are fully understood and recognized in their construction. It is not enough to have a fine house, plenty of children and youth, a full corps of teachers, and plenty of money, in order to make the school successful. These incidents and more are all necessary, and in the degree that any one of them is wanting will the inefficiency of the school be manifest.

Educational hobbies are very dangerous things to mount; and he who will ride one had better study well its paces, or he may be unluckily thrown, to the discomfiture of himself and his backers. We have no hobby to ride; we will endeavor to investigate fairly and frankly, to find the real excellences of the graded system, and at the same time point out some of the errors, as exhibited in many schools, which impair or perhaps destroy their influence for good.

The great fundamental idea of a system of schools united and graded is the *division of labor.* In our next number we expect to take up this principle as exhibited in some of the extensive operations of mechanical industry, and eliminate such subordinate principles and facts as shall illustrate some of the more important conditions necessary to success when a large number of children of various ages and attainments are to be instructed.

We believe there is no system of schools which combines so many good points as a well-regulated Union Graded school; and, on the other hand, we conceive that no system of schools can be devised which is subject to greater perversions, or capable, if improperly understood and managed, of doing greater injury to those whom it is intended to benefit.

[To be continued.]

COMMENTS ON THE SCHOOL LAW.

DEPARTMENT OF PUBLIC INSTRUCTION,
Springfield, Ill., Feb. 1862.

SCHOOLS COMPOSED OF SCHOLARS FROM TWO OR MORE DISTRICTS — WRITTEN PERMISSIONS — MODE OF PROCEEDING UNDER SECTION 35, ACT OF 1861. — There seems to be some diversity of opinion and practice as to the proper construction of so much of the 35th section of the Act of 1861 as relates to the transfer of pupils from one district to another, and the respective duties of township and district officers. I propose, therefore, briefly to examine that provision of law, point out the obligations which it imposes, and state the method of proceeding which it virtually enjoins.

The main purpose of that portion of the 35th section to which the present inquiry relates is simply to promote the public convenience and to increase the educational facilities of each separate community. If the children of a given school-district could not, under any circumstances, attend school in another district, it is clear that great inconvenience to the public, and serious loss to individuals, would often result. Two classes of cases especially require the benefit of the legal provision in question: when a given school is, for the time being, unable to accommodate all who are entitled to attend, and when certain scholars desire and are qualified to pursue branches of study which are not taught in the school of their own district. Both of these cases are of frequent occurrence, and the law would be defective if it did not anticipate and provide for them. We often find two contiguous districts one densely and the other sparsely settled; and, as a consequence, the winter school of the one is crowded, while that of the other is thinly attended. How obvious that, in such a contingency, the surplus pupils of one school should be permitted to occupy the vacant seats of the other. Again, there may be scholars in one district who should study Algebra, Natural Philosophy, or other higher branches,

while the best interests of their district, as a whole, do not justify the formation of classes in those branches, or the teacher may not be able to instruct in them. Now, if such scholars can enter the classes, and receive the instruction which they desire, by crossing over into an adjoining district, should they not be permitted to do so? The expediency of establishing by law the right of transfer in certain cases might be sustained by other valid considerations, but those already named are sufficient to show that the provision of law under review subserves the public convenience and utility; that it is based upon amity and mutual advantage.

But, to guard against abuse, the right of transfer should be subject to proper restrictions; else, what was intended to be a great convenience and benefit might prove a serious evil. Without such limitations, the schools of one district would be liable to be crowded to excess, and those of another to be decimated, or even broken up. There would be no check to the ebb and flow of scholars from district to district, according to the accidents of time, place and distance, or to the preferences and caprices of parents and children with respect to particular schools and teachers. The result of this would be fatal to the stability and effectiveness of the schools. No teacher could be sure that his organization of to-day would not be broken up by the accessions or withdrawals of to-morrow; no Board of Directors could know that the accommodations provided for one week of the term would be adequate for the next week; while the orderly keeping of the schedules and registers of the schools would be nearly impossible.

The remedy provided by law against these evils is simple and complete. It is based upon the right of each Board of Directors to determine for themselves whether pupils from other districts shall or shall not be admitted to their school. It requires written permissions as the sole condition upon which transfers can be made. These permissions must be obtained from the directors both of the district from which and the one to which the pupils are proposed to be transferred. If the consent of one Board only were required, it is plain that it might work to the great injury of the rights and interests of the other. The notes of consent must, to be valid, be signed by a majority of each Board, or by the clerk of each Board in behalf of or by order of said Board.

No particular form of permission is prescribed in the Act, nor is it material. It will perhaps be found most convenient, as a general rule, for those who desire a transfer to apply first to the directors of their own district for their consent, and then to the directors of the district to which a transfer is sought for their concurrence. One paper will

thus answer for both districts. If the above course is pursued, the license of transfer, when duly signed by the officers of both districts, might be in the following simple and comprehensive form, viz:

A. B., a resident of District No. 1, T.—— R.——, etc., has our permission to attend school in District No. 2, T.—— R.——, etc.

C. D., E. F., } *Directors of District No 1, T.——, R.——.*

Approved. G. H., I. J., } *Directors of District No. 2, T.——, R.——.*

These certificates of transfer, when duly signed as above, are to be returned to the teacher and carefully filed by him, as evidence that the transfers were legal and regular. The first duty of a transferred pupil is to hand his permit to the teacher, and the first duty of the latter, whenever a pupil of whose residence he is ignorant enters the school, is to ask for the credentials. If the pupil is from another district and without a pass, the teacher should politely inform him of the requirements of the law, and of the steps necessary to be taken, and decline to receive him or enter his name in the register until the requisite permission is obtained. By strict adherence to this rule, on the part of the teacher, all subsequent misunderstanding and difficulty will be avoided. The teacher should fold the passes neatly, in bill form, properly indorse and carefully file them for future reference. The indorsement may be in the following form:

A. B.

Transferred from

District No. ——, T.——, R. ——, etc.

There is an obvious propriety in requiring the passes to be filed with the teacher, because he is obliged to keep a separate schedule of scholars from each different district and township, without which the days' attendance of such scholars can not be included in the apportionment of the public funds. He should therefore have official evidence, at the outset, of the residence of each scholar. Directors can not be too particular, at the time of employing a teacher, to enjoin upon him the duty of admitting no non-resident pupil without a proper transfer, and of keeping accurate separate schedules of all such non-resident pupils. And for refusal or neglect on the part of the teacher to comply with these necessary requirements, the directors may deduct from his wages a sum equal to the loss sustained by the district through his refusal or neglect as aforesaid: *provided, always,* that due notice of such proposed deduction was given to the teacher at the time of his employment; otherwise the district, and not

the teacher, must bear the loss. In estimating the proper deduction for default in keeping a separate schedule, the aggregate number of days' attendance of the whole school should be taken as the basis. Thus: suppose two pupils are received from another district and no separate schedule is kept; and suppose the total attendance of the whole school is 1000 days, and of the two pupils in question 100 days. The ratio of the latter to the former governs the deduction, being in this case one-tenth; so that if the teacher's wages were, say, $75.00, he would lose $7.50, etc. But I do not anticipate that any teacher, after having been duly notified, will suffer his wages to be reduced through his neglect of so plain and simple a duty as that of keeping a separate schedule and demanding written permissions.

It has been suggested that the certificates of transfer should be returned with the schedules to the township treasurer, as evidence that the transfers were approved by the directors and that the schedules should be paid. This seems reasonable, and yet it may well be doubted whether it would be best, upon the whole, to lay down the rule that no schedule of transferred scholars should be paid unless accompanied by the written permits. It is well known that school-directors and teachers are not always prompt business men; that they omit many things which they would cheerfully have done if their attention had been called to them. So in respect to granting transfers: hundreds of pupils go from one district to another without written permissions, not because the directors refused to give them, or had the least objection to the transfers, but by common consent — the directors being entirely willing to grant the requests if applied to, but giving the subject no attention one way or the other. Now, I make no plea in extenuation of such indifference or neglect, by any means, but simply suggest that, *the facts being as they are*, it would not be expedient to deprive teachers and districts of their just dues under the operation of an inexorable rule that the permits must be filed with the treasurer or the schedules shall be rejected. But, whatever may be the merits of the case, the law itself is plain — the schedule itself is to be taken by treasurers as legal evidence that the scholars named therein were transferred by consent.

Let us now inquire whether the practical operation of this section is just toward each district concerned in the transaction; whether each receives a fair equivalent or not. A brief examination will satisfy us, I think, that the working of the law is equally protective of the rights of both districts — that neither has any just cause of complaint. The section virtually authorizes the directors of one district to place (by mutual consent) a portion of their school-children in another district

to be educated — to employ the services of the teacher of another district to do what can not, for various reasons, be so well done in their own. The relation of the two districts is, therefore, simply that of employer and employed, and the pecuniary rights of each should be adjusted upon that principle. The district that instructs the transferred children — that performs the service for the other — should be paid for the service rendered. This the law requires shall be done; the trustees "shall instruct their treasurer to pay the amount certified to be due, to the teacher entitled thereto". But who pays this amount? The district from which the pupils were transferred. How is that district reïmbursed for the amount so paid? Thus: the transferred children are *enumerated* in the district *where they reside;* so the district loses nothing in the distribution upon *census.* Again: in apportioning upon *schedule* the home district is entitled to what accrues upon the number of days' attendance certified in the schedule of its transferred children, in addition to what accrues upon its own schedule. So the district loses nothing in the distribution upon schedule. True, the district pays out a certain sum to the teacher of the other district, but for that an equivalent has been received in the service rendered. Assuming, therefore, that the salaries of teachers and regularity of attendance are the same in the two districts (and practically this may be assumed), it will be seen that the financial account between the two districts is exactly balanced.

In apportioning the teacher's wages among the several districts, under this section, and fixing the amount that shall be certified in each schedule to be due, the grand total of days' attendance should be taken as the basis. Thus: suppose a certain school is composed of scholars from three different districts; let the grand total of attendance for the whole school be 2400 days, of which 1200 days are the aggregate of one district, 800 of another, and 400 of the third. Now, if the teacher's salary is $300, then in the schedule of the first district the directors should certify $150 to be due; in that of the second district, $100; and in that of the third, $50, etc. The greatest care should be taken upon this point. Some erroneously suppose that the whole amount due the teacher should be certified in each schedule. The present law requires the 'amount certified' to be paid, whatever it may be. Unless the teacher's wages are correctly apportioned to the several districts, upon the basis and in the manner above stated, it is evident that he *may* be paid double or treble the sum due him, according to the number of districts sending to the school.

But let us notice more in detail the mode of procedure under this section.

The law requires the trustees to order the treasurer to pay to the teacher the amount certified to be due on each separate schedule. If the schedule is properly kept, and duly certified, it must be accepted by the township officers as conclusive evidence of the consent of directors, and paid accordingly. It is neither the duty nor the right of the trustees and the treasurer, under the present law, to demand that the written permissions be exhibited to them, or filed with the schedule.

It is competent for the *directors* of either district to object, in writing, to the payment of the teacher, on the ground that their consent had not been given. And when such written objection is duly served upon the trustees and treasurer the latter must reject the schedule, but not till then. Directors some times complain that they know nothing of the existence of such schedules until it is too late to protest; that they have no means of knowing, under the present law; and hence that their funds are often wrongfully paid out to other districts. That such complaints are unfounded, to say the least, a moment's reflection will show. Directors are required by law to 'visit and inspect their schools as often as practicable'. A single visit of half-an-hour during, say, the last week of each term of school, would suffice for a full and complete knowledge upon the point in question; for in half that time the teacher's file of permits could be thoroughly canvassed. Can any Board of Directors say that it is not 'practicable' for at least one of their number to step into the school for a few minutes, once in a term? Men who can not spare twenty or thirty minutes a year to visit the schools of which they are the sole legal guardians have little right to expect that matters will always go to suit them. No, there is no cause for their ignorance in the case. Both Boards of Directors may know whether scholars have been transferred to or from their districts or not, and who they are, and whether permits have been granted or not. The information is at hand if they choose to avail themselves of it. If they are faithful to their legal obligations they can not be ignorant on these points; and if they neglect their duty they should not find fault with the trustees for performing theirs, nor with the law which prescribes the duties of both.

The trustees surely can not misapprehend their line duty under this section. How can language be plainer than this: "upon the return of which (separate schedules) to the trustees of the proper township, *they shall instruct their treasurer to pay* the amount certified to be due, to the teacher entitled thereto." If, therefore, schedules are paid that should not be, it is the fault of the directors in not filing their protest, not of the trustees; for the latter have no option, but must pay unless written objections are presented.

I will take this opportunity to suggest that it would be *advisable* to return the permits to the treasurers with the schedules, that they may be *permanently filed for future reference*. Not that it is *necessary*, not that the law requires it, not that it can in any manner affect the duty of treasurers in respect to the schedules, but simply because it is desirable that the certificates of transfer should be preserved, and this can best be done in the office of the treasurer.

It is important to notice, here, that no district indebtedness of any description can be paid out of the township funds *as such;* that is, before said funds are apportioned to the several districts. I am often asked whether the 35th section requires that the separate schedules of transferred scholars shall be paid from the funds in the treasurer's hands subject to distribution *before* such distribution is made, or *afterward*. The question arises from a misapprehension of the mutual relations of districts and townships under our present system. The Act of 1855 made the whole township responsible for the debts of individual districts, authorizing the levy of a tax upon the whole township to meet such debts, and of course allowing directors to draw orders against the township fund as such. But this provision was repealed in 1857, and in its stead the better principle was adopted of making each district independent, and exclusively responsible for all the debts of its own contracting.

I remark, then, that under the present law townships, as such, have nothing to do with, nor any legal responsibility for, the payment of schedules. Schedules are known to the law only in connection with districts, and can only be paid from funds which *have been duly appropriated and set apart*, by the trustees, *to the several districts*, as provided in the 34th section. The only debts which can be paid by the trustees prior to the apportionment of the funds to the districts are those enumerated in Section 34, viz: the commissions and books of the treasurer, and the cost of dividing and platting school lands, etc. It must, therefore, be distinctly understood that the amount due the teacher as certified in the schedule of transferred scholars should on no account be paid from the funds on hand *before* the same are apportioned by the trustees; that would make all the districts share in the liabilities of one. The district, not the township, owes the teacher; and the district, and not the township, must pay him. If there is a *surplus* to the credit of the proper district when the separate schedule is returned, the teacher may be paid therefrom at once; otherwise, he must wait till the funds are apportioned as aforesaid.

In making the apportionment where separate schedules are returned, as prescribed in this section, trustees will observe that each district is

to have the benefit accruing from the schedule of those of its own children who have attended school elsewhere. To make this plain, let us suppose that on the first Monday in April next the trustees of a certain township should meet to apportion the funds, as required by law. They first apportion on census of children under 21. Each district receives 'in proportion to its number of children under 21', no matter where they may have attended school. All this is plain enough. Next they proceed to apportion on schedules. They find on file a regular schedule from District No. 1, and also a separate schedule from District No. 2 of scholars *resident in and transferred from* No. 1. Now, what is to be done? Simply this: *Add the attendance of the regular schedule from No. 1 to that of the separate schedule returned from No. 2, and apportion to No. 1 on the aggregate of both.* It is in effect the same as if No. 1 had had two schools within its own limits, and returned two schedules.

No. 1 thus has the means to meet the demands of the teacher from No. 2. The trustees then say to their treasurer: "We find, say, $25 due the teacher of No. 2 on his separate schedule of scholars transferred from No. 1. You will, therefore, pay said amount to said teacher, take his receipt, and charge the same to the account of No. 1." The entry in the treasurer's book would be substantially as follows:

Treasurer of T. ——, R. ——, etc., in account with District No. 1.
By amount paid teacher in No. 2, as per separate schedule returned, etc., $25.00.

The transaction is a very plain and simple one; it is difficult to see how it can be misunderstood. The principle would be the same, and the same course precisely should be pursued, if the two districts are in different townships.

The point to be kept distinctly in view in the case supposed is that No. 1 is legally debtor to No. 2 for the amount certified, in the separate schedule returned, to be due the teacher. Said amount must be paid from funds apportioned and belonging to said No. 1. And if said No. 1 has not funds enough to pay said teacher, then said No. 1 must provide the means of payment by tax or otherwise. No. 2 has clear legal recourse upon No. 1 for the full amount of said claim.

It has been suggested that the peremptory demand for written permits is incompatible with the subsequent provision that the schedule itself shall be evidence of consent. But it will be observed that the mandatory requirement applies to the directors and teachers, not to the trustees and treasurers. How, then, shall the latter be satisfied that such permits have been issued? Either by causing the permits

to be exhibited, or in some other way which shall be deemed equivalent. The law declares that the schedule shall be deemed equivalent; 'shall be taken as evidence of consent', as proof that the peremptory condition of the law has been fulfilled. It may not in all cases be *real* proof, but it is always *legal* proof, with which the township officers are required to be satisfied. Let the directors visit their schools; see what pupils have left the district or come into it, and that the teacher is faithful in requiring and filing the permits, promptly notifying the treasurer if any go or come without leave; and there need be no difficulty at all in the practical working of this section.

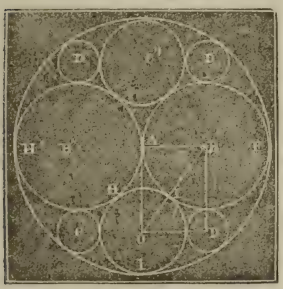
These views are respectfully submitted to district and township school officers, for their attentive consideration; and the hope is entertained that they may serve to remove any doubts which may have existed as to the true intent and meaning of the section which has been examined, and the duties which it enjoins.

NEWTON BATEMAN, Sup't Public Instruction.

MATHEMATICAL.

Solutions.—XXVIII (*November*).

"Within a given circle draw eight smaller ones, which shall not intersect nor be included within each other, in such a manner that the unoccupied space shall be equivalent to exactly one-sixth of the original circle."



Construction. Draw the circles B and B″, with radii equal to one-half the radius A. Then, as the areas of circles are to each other as the squares of their radii, it follows that they are together equivalent to one-half the circle A.

Draw the circles O and C″, with radii equal to one-third the radius A. That these circles are tangent to the circumferences of circles A, B, and B″, and hence do not intersect, may be thus proved:

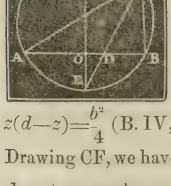
Let us suppose the circle O, with radius equal to two-thirds of the the radii B and B″, be drawn, to touch externally the circles B and

B″. Then will the circumference of circle A be tangent to circles O, B, and B″; for it is evident that ABO is a right-angled triangle. By construction BO is equal to five-thirds of radius B; and as AB is three-thirds, by the well-known property of right-angled triangles, AO must be equal to four-thirds; OI is two-thirds, thus making AI equal to six-thirds of radius B, which AF and AH′ also equal. Hence the point I falls in the circumference A, and the circle O is tangent to the circle A. The same is true of the circle C″. These circles having radii equal to one-third of radius A have together an area of two-ninths of circle A, which added to the former one-half gives us thirteen-eighteenths of circle A, the space occupied by the circles O, C″, B, and B″.

Next draw the circles D, C′, D″, D‴, having radii equal to one-sixth of radius A. That they will not intersect the previously-drawn circles is evident from the case of circle O. Completing the rectangle ABDO, OD is equal to AB. The radius O forms two-thirds of this line: hence radius D is one-third, or one-sixth of radius A. In the same manner, BD equals AO, or four-thirds of radius B. Taking from this radius B, radius D remains, equal to one-third, or one-sixth radius A. The circles, therefore, do not intersect. As each of these circles has a radius of one-sixth radius A, their areas must together equal four thirty-sixths, which added to the former thirteen-eighteenths gives an aggregate of five-sixths of circle A. The unoccupied space must therefore be equal to one-sixth of circle A. Q.E.D. F. F.

XXIX. "To determine a triangle, having given the base, the line bisecting the vertical angle, and the diameter of the circumscribing circle."

Let ABC be a triangle, EF the diameter of the circumscribing circle perpendicular to AB, and CD the line bisecting the vertical angle: this line will pass through E, the middle point of the arc AEB.



Let AB $=b$, CD $=a$, EF $=d$, AC $=x$, BC $=y$. Auxiliaries: EO $=z$, DO $=u$, DE $=v$, OF $=d-z$.

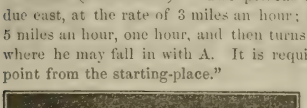
$z(d-z)=\frac{b^2}{4}$ (B. IV, Prop. 28, Legendre); whence $z=\frac{d\pm\sqrt{d^2-b^2}}{2}=l$. Drawing CF, we have two similar right-angled triangles EOD, EFC; hence, $d:a+v::v:l$, or, $v^2+av=dl$; whence, $v=\frac{-a\pm\sqrt{a^2+4dl}}{2}=m$, also, $u=\sqrt{v^2-z^2}=\sqrt{m^2-l^2}=n$. Then $xy=a^2+\left(\frac{b}{2}+n\right)\left(\frac{b}{2}-n\right)$ (B. IV, Pr. 31), and $x:y::\frac{b}{2}+n:\frac{b}{2}-n$; whence, $x=y\times\frac{\frac{b}{2}+n}{\frac{b}{2}-n}$, and

$y=x\times\frac{\frac{b}{2}-n}{\frac{b}{2}+n}$. Substituting these values in the preceding equation, and reducing, $x=\frac{1}{2}\sqrt{\frac{(4a^2+b^2-4n^2)(b+2n)}{(b-2n)}}$

$$y=\tfrac{1}{2}\sqrt{\frac{(4a^2+b^2-4n^2)(b-2n)}{(b+2n)}}$$

Prof. CHARLES DAVIES.

XXX (*December*). "Two persons start from the same point: A travels due east, at the rate of 3 miles an hour; B travels due southwest, at the rate of 5 miles an hour, one hour, and then turns and travels toward the nearest point where he may fall in with A. It is required to determine the distance of this point from the starting-place."



Put $3=a$, $5=b$, $AC=x$, $BC=y$. The triangle ADB gives the equation $AD^2=BD^2=\frac{AB^2}{2}=\frac{b^2}{2}$; hence $AD=BD=\frac{b}{\sqrt{2}}$. The triangle BCD gives the equation $BC^2=BD^2+DC^2=BD^2+(CA+AD)^2$; therefore, $y^2=\left(x+\frac{b}{\sqrt{2}}\right)^2+\frac{b^2}{2}=x^2+\sqrt{2}bx+b^2$. The conditions of the problem give the proportion $AC:AB+BC::a:b$, or, $x:b+y::a:b$: hence, $bx=a(b+y)$; from which, $y=\frac{bx-ab}{a}$. Substituting this value in the equation above, $(bx-ab)^2=x^2+\sqrt{2}bx+b^2$: hence, $(bx-ab)^2=a^2(x^2+\sqrt{2}bx+b^2)$, or, $b^2x^2-2ab^2x+a^2b^2=a^2x^2+\sqrt{2}ba^2x+a^2b^2$, or, $b^2x^2-2ab^2x=a^2x^2+\sqrt{2}ba^2x$: hence, $b^2x-2ab^2=a^2x+\sqrt{2}ba^2$, and, by transposition, $(b^2-a^2)x=2ab^2+\sqrt{2}ba^2=ab(2b+\sqrt{2}a)$. $x=\frac{ab(2b+\sqrt{2}a)}{b^2-a^2}=\frac{15(10+\sqrt{2}\times3)}{16}$

J. W. O.

PROBLEMS.—IV. A and B traveled on the same road, and at the same rate, from Portland to Boston. When A was 50 miles from Boston he overtook a drove of geese, which were proceeding at the rate of 3 miles in 2 hours; and 2 hours afterward he met a stage-coach, which was moving at the rate of 9 miles in 4 hours. B overtook the same drove of geese when he was 45 miles from Boston, and the stage-coach exactly 40 minutes before he arrived within 31 miles of Boston. Where was B when A arrived in Boston? X.

V. If 3 men do as much as 7 women, and 10 women as much as 27 boys, and 42 boys as much as 75 girls, and 36 girls can bind 500 sheaves in an hour, how many can 12 men bind in an hour? F. F.

VI. A family of 10 persons took a large house for a half-year, for

which they agreed to pay $500. At the end of 14 weeks they took in 4 new lodgers, and after 3 weeks 4 more; and so on at the end of every 3 weeks during the term. How much rent must one of each class pay? J. W. O.

VII. A and B hired a coach in Chicago to go 50 miles, for $25.00, with liberty to take in two more when they pleased. After riding 15 miles they took in C, who wished to go the remainder of the journey out, and return with them to Chicago. On their return, at the distance of 25 miles from town, they admitted D for the remainder of the journey. Please settle the coach-hire equitably between them.

J. W. O.

[Arithmetical solutions are requested to these problems.—Ed.]

The True Teacher.—Give me the teacher on whose desk blooms the bouquet culled by a loving pupil's fingers; whose placid brow and winning smile are more potent auxiliaries than ferules or frowns; whose eye, magnetic with kindness, whose voice, electric with love for his calling, wakes up into untiring action all that is best and noblest in the sympathetic, fresh young hearts before him. A *human* teacher, who recognizes in every boy before him (be he poorly or richly clad; be he glorious in form and face as a young Apollo, or cramped and dwarfed into unshapeliness in the narrow cradle of poverty) an immortal soul, clamorous with its craving needs, seeking the light, throwing out its luxuriant tendrils for something strong and kindly to cling to, longing for the upper air of expansion and strength: God bless the *human* teacher who recognizes and *acts* as if he recognized this! Fanny Fern.

Strong Minds in Weak Bodies.—Why is it 'no go' with some bright intellects? A strong mind in a weak body is like a superior knife-blade in a miserable handle. Its workmanship may be ever so finished, its temper ever so keen; but, for want of means to wield it properly, it will not cut to much purpose. Ambitious youths, who intend to carve out fame and fortune with their sharp intellects, should think of this simile, and see to it that their bodies—the handles whereby they are to manage that wonderful weapon, the human mind—are kept in sound-jointed, firmly-riveted, perfectly-cleansed condition.

EDITOR'S TABLE.

EDITOR'S CHAIR.

THE PROFESSION OF TEACHING.—In our last number we presented our readers the Report of the Secretary of the Board of Examiners, giving a detailed account of the examination of candidates for State Certificates. Most of our readers are already aware that this Board of Examiners was appointed by the State Superintendent, for the examination of teachers, in pursuance of the following section of the School-Law, as amended by the late General Assembly:

> The State Superintendent of Public Instruction shall also be and he is hereby authorized to grant and issue State Certificates of eminent qualifications as teachers to such persons as may be found worthy to receive the same, upon due examination, by himself or others whom he shall appoint for that purpose, and who shall exhibit satisfactory evidence of practical experience and success in teaching. Said State Certificates shall supersede the necessity of any and all other examinations, and shall be of perpetual validity in every county and school-district in the State: and the fee for each of such certificates shall be five dollars. But a State Certificate may be canceled by the State Superintendent upon proof of immoral or unprofessional conduct.

The first examination under this amendment was held at Bloomington, on the 2d and 3d of July last. At that examination eight teachers presented themselves, of whom five were awarded the Diploma. The small attendance on the first examination was not a matter of much surprise to the friends of the movement. They expected it would require a short time, at least, for teachers to understand the nature and importance of a project to which they had given little or no consideration. The time chosen was such that many were prevented by their engagements from being present; and the last, but most cogent reason, perhaps, was that few were able to bear the expense of the trip when the examination was the only object.

All, however, looked forward to this, the second examination, as the test of the success of the plan; when it was to be determined by our *teachers* whether there was to be hereafter a 'Teachers' Profession'. At this examination was to be tested the sincerity of our frequent and loud complaints that ours has not been a recognized profession, and that its dignity and importance demanded such recognition.

The success of the second examination was beyond even the anticipations of its its best friends. Eighteen candidates, of whom two were ladies, received the Professional Certificate. It is unnecessary to enter further into the details of the examination, as they have already been given in Mr. Blodgett's Report; that it was sufficiently thorough and accurate to test the merits of the candidates, and their worthiness to receive such a certificate, any would have been convinced by being present.

We congratulate the teachers and friends of education throughout our State

that the inception of this long-desired plan has proved so successful. We look hopefully forward to the day when it, working side by side with our Normal School, will infuse into our teachers higher ideas of their calling; and then the day will soon dawn when teaching will be both recognized by our people (as it now is by law) and respected as a profession.

It is to us a source of no little pride and gratification that Illinois has thus, in the recognition of the teacher, so far outstripped her sister States. Although the subject has been agitated in many of them, yet we believe that but one beside our own has adopted this system, so evidently necessary to give character and dignity to that profession on which her welfare is most dependent.

We propose giving a short account of the origin and progress of this movement in our State. Among our best teachers it had been for a long time a subject of earnest thought how the teacher's calling might receive that public recognition at the hands of the State, as a learned profession, to which it is entitled, and which is necessary to secure for it that appreciation of its importance and dignity on the part of the people it deserves. The first public action in favor of the system of Professional Certificates was had at the session of the State Teachers' Association held at Decatur, in the winter of 1857; although much had been written in the pages of the *Teacher*, as well as in other publications, in behalf of this important educational measure, and much had been said by its friends in its favor, yet here the matter was first placed before the teachers and the public in a regular and practical manner. At this meeting a committee was appointed to report to the Association on this subject at their next session. The chairman of this committee accordingly presented to the Association at their next meeting (1858) a report on the subject.

The same committee, being ordered by the Association to report further, presented a report at the session of 1859, which elicited much warm discussion on the part of both its friends and enemies. While the friends of the measure professed to see in it a grand means for the elevation of the profession to its proper rank in the public esteem, its opponents could discern nothing of practical value to be obtained by it.

The committee was a third time directed by the Association to report at the next annual session (1860). The report was accordingly prepared, but not presented. The State Superintendent, whose attention had long been turned to this subject, and who, as an old practical teacher, appreciated the importance of this movement and was greatly interested in its success, had prepared a paper on the subject to be presented to the Association, thus obviating the necessity of a report from the committee. In the paper presented by the State Superintendent the proposed amendment to the law was set forth, and discussed before the Association with so much ability as to obtain, we believe, the unanimous indorsement of the Association. The next General Assembly sanctioned the proposed amendment of the Superintendent, as we have quoted it at the beginning of this article, and it became a law.

Too much praise can scarcely be awarded the Superintendent and those early friends of this most important measure through whose persistent and energetic efforts this efficient auxiliary in our educational system has been adopted. Like its predecessors, the State Association, the *Teacher*, and the Normal School, the examination and admission of teachers to professional honors is an 'institution' in

the educational policy of the State. Thirty-two teachers, among whom are several of the oldest and ablest of the State, now hold the State Diploma. The character as teachers and as men and women of all who have received this honor is such as to do credit to the movement, to enhance the value of the certificate, and to give assurance that a watchful jealousy will guard the future operations of this power, to prevent the bestowal of this honor on any unworthy applicant. To those who have at heart the standing and honor their profession, and have not already obtained the State Certificate, we commend an early consideration of the propriety of so doing. A.

Primary Instruction at Oswego.— Early the past year the Board of Education of Oswego introduced a system of primary instruction into their Public Schools from the Training School of the Home and Colonial School Society, London, sending across the Atlantic for a lady of long experience in this school, to give special instruction to the Oswego teachers.

So well have the Board been pleased with the principles and practical working of this system, that they have decided to invite about thirty of the most eminent educators of the country to meet at Oswego on Tuesday, the 11th of February instant, to give the subject such examination as they may desire. The committee think it will require not less than three or four days: in their note of invitation they say "We adopt this course for the purpose of calling public attention to what we regard as a great improvement in the method of primary instruction usually pursued in this country, with the hope that it may result in promoting a reformation which we deem of the highest importance to the cause of edcation."

Their plan is to have such papers read before the committee as will give a clear idea of the essential features of the system; to illustrate fully the methods of teaching, and give an opportunity of seeing its practical working in the school-room. We notice on this committee Presidents Hill and Anderson; Superintendents Burrowes, Camp, Bulkley, Randall, Philbrick, and Wells, and can not see how their report can fail to be of very general interest. B.

Some Good Spelling.— In a school in one of the large cities in our State two classes were lately examined for promotion. Both classes contained forty-four scholars, of ages ranging from twelve to fifteen years. The word *Montpelier* occurred in one of their exercises, and was spelled in twenty-two different ways, viz: Monpiler, Montpealia, Montpellier, Montpielier, Mompeilcir, Montepelier, Montpealer, Montpieler, Montpeelier, Montpealyer, Montpelia, Montpiler, Montpeiliar, Montpealier, Montpeiler, Montpellar, Montpielur, Mompelier, Mompeler, Montpiela, Mountpeilyur, and Montpelier.

The same classes spelled the word *preceding* in ten different ways, only fourteen spelling it correctly, viz: Preceeding, precedeing, persedind, proceeding, preceeing, preceading, proceding, preseeding, preseding, and presedeing.

In the same exercises were found such specimens of orthography as these: Maskline, nuter, maskalin, eny, nedle, interiogatives, posative, compaired, thear (there), mutch, centences, witch (which), hire (higher), wourd (word), ajative, neadles, Paphlony (Babylon), Lusiana, Mane, Albanny, Main, Artford, New Hamshier, Rohde Island, Rho diland, Rode island, Roah diland, Passuamequada, Hampshier, Pasific, Masserchusetts, Masitut, Delawhare, Canosia, Connetticut, Bayes, Eari, Missuria, Alagana, and Vergina.

One scholar located Babylon in the northeast part of *New Brunswick;* another said *Ke West* is noted for its *State University;* another that *Cape St. Blast*, is noted for its *corral;* a fourth compared much — much, mucher, muchest, and up — up, uper, upest; while a fifth said up, more up, most up.

The teachers in that school must be proud of their scholars. B.

Geographical Changes.— The attrition of rivers and their depositing the soil which they take from one place in another produce great changes in the lapse of time. The Sea of Azof is growing shallow, and will at last become a vast and impenetrable marsh, and the commerce of the Don will cease. The Euphrates is said to be changing its course, finding a channel much to the west of its present location, so that the ruins of Babylon will stand in an unwatered desert; and the river itself will make no perfect channel, but spread out in the marshes at the head of the Persian Gulf.

The Amoo, Jihon, Gihon, or ancient Oxus, was once the channel of considerable commerce between Europe and Asia; and ancient authors say that it poured its waters into the Caspian. The place of its mouth is located by Butler at the Balkan Bay, about lat. 40° N., lon. 72° E. It now discharges into the Sea of Aral; and while some think that the reported influx into the Caspian was a mistake, others suppose that it sent a stream to the Caspian in those days, which was perhaps its largest outlet. The writer of an interesting article in the *N. Y. Tribune* says that now it seems likely to resume its ancient channel, which would make it again an important river. F.

New Hampshire on Grammar.— The *N. H. Journal of Education* has maintained for some years past a Grammatical Department, of which Mr. Henry L. Boltwood has been editor. We have often noticed good things in it, and have been much pleased with the editor's share in them. But he says that only six New-Hampshire teachers have contributed to it, and echoes the inquiries of a correspondent whether teachers are afraid to write, or too busy, or lazy, or indifferent. The state of things in Illinois is much the same, or we might venture to suggest a similar department in our *Teacher*. But who could be relied on to write for it? Only ten persons beside the editor have given a line upon the subject during the past two years, and many of these have ceased to write, and are gone away.

The N. H. correspondent says a good thing which we especially commend to our *finished* grammarians, particularly to such as we have found the admirers of Brown and Clark likely to be. "I dislike exceedingly the provokingly-unsatisfactory method which some have of trying to get over a grammatical difficulty by saying that 'It is not good English', when the only evidence of it is that the form of words is one that they can not analyze. [For example, this from Irving: 'The Pinta was soon lost sight of'.—W.] It may be idiomatic English, as well authorized and thoroughly established as any thing in the language; yet if it presents seeming syntactical difficulties it must be denounced as a non-descript and rudely set aside! Now this is all wrong. The English language has modes of expression of its own; and because grammarians have failed to explain them or give rules for their concord or government, they should not therefore be condemned as bad English. The fault is with the grammarians rather than with the language."

The editor of the department commends what the correspondent says, and re-

marks thus: "Until we attempted to write out our ideas on grammatical subjects we never realized how hard it is to write clearly, briefly and forcibly upon familiar subjects. Nor had we a 'realizing sense' of the gross defects of our numerous grammars. How very few hints do we find in them to guide us in the correct use of language! Yet we have learned to sympathize with the difficulties of their authors. Their very number shows that there is a great want some where. Until a good grammar appears, teachers must supply the deficiency as best they can."

Ah, Mr. Boltwood, not one in a thousand of those who try to teach grammar understands the subject enough to know that there are *'defects';* and few of those who know so much can tell what to do about it. WILLARD.

PRINCE ALBERT.— Franz-August-Carl-Emanuel Albert, Prince Consort, and Duke of Saxe-Coburg-Gotha, was the next brother and heir presumptive to the Duke of Saxe Coburg, whose ancestors were Margraves of Meissen in the twelfth century, and Electors of the Empire from 1425 to 1547, when the electoral dignity passed over to the collateral line of this house, whose present head is the King of Saxony.

Prince Albert was born August 26, 1819, at the Castle of Rosenau. He received a thorough education at the hands of private tutors, and then, at the age of eighteen, he entered the University of Bonn as a student of jurisprudence. The teachers of the University are said to speak with pride of his devotion to his studies, affirming that he rose not later than six, and pursued his studies until seven in the evening, allowing himself but three hours for dinner and recreation. He spent a year and a half in the institution, and soon after, with his father and brother, visited England to attend the coronation of Her Majesty, returning at Michaelmas to Coburg.

At this time he made the acquaintance of Her Majesty, and after his departure rumor was busy in pointing him out as her future consort. The ministerial journals denied it; but soon after Leopold of Belgium visited England, and in 1839 Prince Albert himself, which strengthened the belief. Immediately after his departure, the Queen summoned the members of the Privy Council to Buckingham Palace, and communicated her intentions of forming an alliance with the Prince. On its announcement in the House of Lords, the Dukes of Wellington and Cambridge spoke in favor of the alliance, the latter predicting his future high popularity. The Prince was a great admirer of the arts, a ready draughtsman, skilled in music, and has written verses. His popularity was greatly increased by his patronage of the Great Exhibition of 1851, and he was the first who suggested that it should not be merely an exposition of British productions, but an *exhibition of the industry of all nations.*

He was naturalized on his marriage to Her Majesty, Feb. 10, 1840, by act of Parliament, receiving a grant of £30,000 per annum; the title of Royal Highness by patent; the right to quarter the royal arms of England; by royal warrant precedence next the Queen, and Prince Consort by order in council, in June, 1857. He was a member of the Privy Council; Chief Steward of the Duchy of Cornwall, and Lord Warden of the Stannaries; Governor and Constable of Windsor Castle; Grand Ranger of Windsor, St. James's, and Hyde Parks; a Field Marshal, and Colonel-in-Chief of the Rifle Brigade; Colonel of the Grenadier Guards; Captain-General and Colonel of the City of London Artillery Company; a Knight

of the Garter, of the Thistle, and of St. Patrick; also, G. C. B., G. C. M. G., Acting Grand Master of the Order of Bath, and Knight of the Order of the Golden Fleece. His scholastic dignities were Chancellor of the University of Cambridge, LL. D., D. C. L., and PH. D. He was also Master of the Trinity House, and President of the Royal Commission of the Patriotic Fund for the relief of the widows and orphans of soldiers, seamen, and marines, who fell in the Russian War.

During a visit to Cambridge he caught cold, and soon after, at the review of Eton volunteers, he added to it, and a gastric fever ensued. On the fifteenth day of December, after three days of decided illness, he rallied, and was pronounced out of danger. That afternoon at four a sudden reäction took place, the worst symptoms of typhoid fever appeared, and he continued to sink as if from sheer exhaustion, until, at eleven P. M., he quietly ceased to breathe.

The funeral took place Dec. 23, about noon, the old custom of interring members of the royal family by torch-light having been discontinued at the burial of William IV.

The Prince was the father of nine children, baptized as follows: Princess Victoria Adelaide Maria Louisa, Princess Royal, born November 21, 1840, and married on the 25th of January, 1858, to the Prince Frederic William, son of the King of Prussia; Albert Edward, Prince of Wales, born Nov. 9, 1841, heir apparent; Princess Alice Matilda Mary, born April 25, 1843; Prince Alfred Ernest Albert, born August 6, 1844; Princess Helen Augusta Victoria, born May 25, 1846; Princess Louisa Caroline Alberte, born March 18, 1848; Prince Arthur William Patrick Albert, born May 1, 1850; Prince Leopold George Duncan Albert, born April 7, 1853; Princess Beatrice Mary Victoria Feodora, born April 14, 1857.

MAURY'S REPUTATION.— The *N. Y. Tribune* says "That arch traitor and charlatan, Lieut. Maury, was not long since proposed as a candidate for the honor of being chosen a corresponding member of the French Institute. His claims were referred to a committee of eminent *savans*, who reported unanimously that the public reputation of Mr. Maury was the work of writers who knew nothing of the subjects they discussed." Maury has but taken the *easiest* way of getting a reputation, and one which is very common in all professions and occupations, even teaching not excepted. F.

A NEW BRAIN-DISEASE.— H. W. Beecher says, in a recent editorial, "The mortuary reports speak of numbers of children, annually, dying from water on the brain. Milk-and-water on the brain is even worse; for the children do n't die." So much in criticism of childish writing for children. We have often seen a form of intellectual dyspepsia arising from feeding tender stomachs with food unsuited to their age: the sciences are made exceedingly small and crammed in; the text-book furnishes the mince-meat sufficiently diluted with saw-dust, and the teacher acts the part of stuffer. "*The comprehension of some things requires a maturity which no forcing process can create.*" F.

EDITOR'S SICKNESS.— Owing to the severe sickness of the Editor, who has been confined to his bed during the past two weeks, the article on 'County Commissioners' does not appear in this number as was promised. It is hoped he can resume his pen in time to continue the articles in the March number. C.

Vermont Decision.— In the Vermont Supreme Court it has been decided that though a schoolmaster has in general no right to punish a child for misconduct committed after dismissal of school for the day and the return of the pupil to his home, yet he may, on the pupil's return to school, punish him for any misbehavior committed out of school which has a direct and immediate tendency to injure the school and subvert the master's authority. The rights of teachers in punishing pupils, and the limitations to those rights, are clearly set forth in the opinion of the Court. Springfield Republican.

From some *New* Testament.— In an exchange paper we find these words: "'Cleanliness is next unto godliness', as St. Paul asserts." We can not say that St. Paul never uttered such a sentiment, for he said many unrecorded good things; but this saying is not in any of his writings now extant, nor is any thing like it in them; even the words *cleanliness* and *cleanness* are not in the New Testament. We believe the saying belongs to John Wesley. ɣ.

Capt. Conatty.— The *Wisconsin Journal of Education* for December contained an appeal to the teachers of Wisconsin by Mr. Thomas J. Conatty, formerly of Peoria High School. He had been authorized to raise a 'Teachers' and Students' Company' for the First Cavalry Regiment of that State. He is seconded in his movement by the Major, lately Prof. Pomeroy, of Appleton College. Mr. Conatty writes a very stirring appeal, and will probably get up an excellent company. His zeal merits success. One statement made by him is rather new to us in Illinois: "The State of Illinois has a regiment of teachers in Kentucky to-day, battling for the Union." How stories do grow as they travel! ɣ.

"Read as you Talk."—In the N. H. State Teachers' Association an essayist noticed this as one of the 'perversions' of the schools. His view was in the subsequent debate called in question: Messrs. Boltwood, Crosby and Hayward considering the rule a good one, while Mr. Warner (the essayist) and Mr. Quimby opposed it. We do n't see what can be said against it if the pupil's mode of talking is not faulty; for if he pronounces his words well he can have no better rule. Once while reading we were interrupted by an auditor who cried out in tones of surprise, "Why, you 're reading! I thought you were talking!" She had not till then seen the book. We counted that the highest of compliments to our reading. ɣ.

Why the Fingers are not of Equal Length.— A master, in illustration of this question, made his scholar grasp a ball of ivory, to show him that the points of his fingers are equal. It would have been better (says Sir Charles Bell) had he closed his fingers upon the palm, and then asked whether or not they corresponded. This difference in the length of the fingers serves a thousand ends, adapting the form of the hand and fingers to different purposes: for holding a rod, a switch, hammer, a sword, a pen or pencil, engraving tools, etc., in which a secure hold and freedom of motion are admirably combined. Exch.

Create a taste in youth for good books, and the pleasures of literature will supply the place of those grosser pleasures that lead astray the unthinking. It is the will made strong by cultivation that enables a man to resist the cravings of those

appetites whose indulgence brings death. The ignorant man must of necessity be a man of narrow views and strong prejudices; and even in questions which involve great moral principles he is quite as likely to be wrong as right. The safe man in society is the man who is competent to do his own thinking. Sel.

A Russian Lake.— The Russian journals have recently been filled with accounts of an extensive lake called Nor-Nuissan, lately discovered, to the south of the Altai Mountains, in Chinese Droungaria. It is frozen from September to May, but it is so full of fish that a great number of Russians, with the consent of the Chinese authorities, have established fisheries on the banks.

Milton.— An undoubted autograph of Milton is in this country. It is his signature in the album of a German scholar, written during his continental travels. The volume was picked up for a trifle by an English lad at Geneva, and, after two or three changes of ownership, came into the possession of a resident of Boston.

Maine Wesleyan Seminary has, during the thirty-six years of its existence, educated more than four thousand teachers. During its existence it has had more than eleven thousand students; during the last year four hundred. This has been accomplished while laboring under a want of suitable buildings and funds.

Ragged Schools.— There are in England 356 ragged day-schools with an attendance of 23,052 scholars, and 192 night schools with an attendance of 20,900.

Tennyson has written an inauguration-ode for the opening of the great Industrial Exhibition at London, next year.

Publisher's Notice.— As a general answer to inquiries for back volumes and single numbers of the *Teacher*, the publisher desires to state that he has on hand no complete sets of any volume except Vol. IV (1858), edited by Mr. Bateman. He can furnish a few copies of that volume, unbound, for $1.00 each. If persons requesting single numbers or parts of volumes fail to receive the numbers asked for or replies to their letters, they will please understand that the publisher can not furnish what they want.

LOCAL INTELLIGENCE.

Mercer County Items.— The teachers of the western part of this county met on Saturday evening, December 7th, 1861, to take into consideration the utility of forming a Teachers' Association, to meet every other Saturday during the winter, in different localities, for the purpose of accomplishing two things very essential to the prosperity of our common schools, viz: First, to awaken all who are engaged in them as *teachers* to a *true* appreciation of the nature of the work they are to perform, and to make each feel the great responsibility that rests upon him as such, and to secure a greater uniformity of teaching the same studies in our

schools; and, second, to raise the standard of education in them, by arousing the patrons to a full sense of the duty that they individually have to perform in regard to the intimate relation that should exist between himself and the teacher of '*his*' school, and the steady and earnest coöperation that he should ever give. After a spirited discussion of the benefits accruing to all who *regularly* attend them, and the best method of conducting the same, the teachers present unanimously resolved to organize, and elected Amos F. Waterman, S. C., President, and M. V. B. Shattuck Vice-President. The Association has held *three* sessions up to this date, each of which was eminently successful. The first meeting was in New Boston, Dec. 21, President Waterman in the chair. Drill exercises were conducted as follows: Grammar by Prof. Shattuck; Reading by Mrs. Shattuck; Arithmetic by J. McManus; Geography by C. F. Waterman. The evening exercises were a discussion, and a lecture by President Waterman, which was an able and eminently practical one.

The next meeting was at the 'Brick-Yard' School-House, January 7th. Vice-President, Prof. Shattuck, presiding. Drill exercises were conducted by Miss Hanby, Miss McManus, and others. The evening session was a very interesting one. Some 250 patrons, pupils and teachers present. Essays were read by Miss S. B. Huntington, and Prof. Shattuck, of New-Boston High School. The former's subject was '*Character* is Power'. The theme of the latter was 'We must labor *intelligently* to interest our pupils'. Both were spirited and well-written productions. A very spirited discussion of the following resolution then followed:

Resolved, That the frequent change of teachers is *more injurious* to our schools than the *indifference of patrons*.

Messrs. McManus and Waterman taking the affirmative, and Messrs. Searles and Shattuck the negative. The Rev. J. H. Scott, of New Boston, then favored the audience with a very able extempore lecture upon the Importance of Education. The third and last session was held at the Eliza-Creek School-House, Saturday, Jan. 11th. Drill exercises conducted by C. W. Searles, C. F. Waterman, J. McManus, and Miss S. B. Huntington; Lecture by C. W. Searles; Essays by Miss Emma Dodge and C. F. Waterman: all of which gave evidence of close thought, and were highly creditable to the authors. The following resolution was discussed by Messrs. Searles, Shattuck, Higgins, Steel, and others:

Resolved, That the present system of common-school education *is not* practical.

The New-Boston High School is in a more flourishing condition than ever before, as it has seventy-five *more* pupils in all departments. The Principal, Prof. Shattuck, has just purchased a *five*-octave Melodeon of *superior* tone (manufactured by the Rev. J. H. Scott, of that city), for the school, with funds obtained from a series of Exhibitions of Rhetorical Exercises. EDUCATOR.

We observe with much satisfaction the energetic efforts of the teachers of Mercer County in the cause of education, as it appears in the above report. The frequency of these institutes is of doubtful utility; but that their influence in promoting the efficiency of teachers and in enlisting the favor and sympathy of the public is great, is unquestionable.

We notice in the report the names of some live teachers. C.

Rock Island.— We have before us, in the *Argus*, the report of the Superintendent of Public Schools of this city, Mr. Charles T. Church. Mr. Church has but recently, we believe, taken charge of the schools of Rock Island, and this is his first report. From it we learn in detail all that is usually embodied in such reports. The number in attendance during the year was 880, of whom 851 were from the city. The number enrolled in the High School was 68. The average attendance of the pupils during the term was 87 per cent., "which," as remarked by Mr. Church in his report, "is a fact in view of the times both satisfactory and encouraging." We wish abundant success to the Superintendent in his labors. c.

University of Chicago.— The trustees of this institution have decided to erect the centre building of the University, including the tower, and to give it the name of Douglas Hall. The name is to be inscribed upon a tablet to be inserted in the tower.

NOTICES OF BOOKS, ETC.

Hints to Common-School Teachers, Parents, and Pupils: *Or, Gleanings from School-life Experience.* By Hiram Orcutt, A.M. Rutland: Geo. A. Tuttle & Co. Brown, Taggard & Chase, Boston.

We have glanced but hastily over this little work, but are much pleased with it. It is the work of an old and successful teacher, who has embodied in it something of his experience for the benefit of other, but especially young teachers. We recommend this book to our teachers as worthy a place in their 'Teacher's Library'.

Music. Horace Waters, Music Publisher, No. 181 Broadway, New York.

We have received from the well-known publishing-house of Horace Waters two charming pieces of music: 'Little Jenny Dow', and 'Why Have my Loved Ones Gone?' As we are not a connoisseur in music, we submitted these pieces to one whose musical acquisitions and taste would render an opinion worthy of regard. She pronounces them charming, as did we on hearing them performed.

The Eclectic Educational Series.

Do our readers notice the new advertisements of Messrs. W. B. Smith & Co., found in our advertising sheets this month? We sat down intending to write an extended notice of some of the works therein named, but we remembered what our State Superintendent says about Ray's Arithmetics and Algebras, and what Prof. Turner says about McGuffey's Readers, and we began to question whether our testimony would add any weight to what these gentlemen have so well said. So we concluded we would call our readers' attention to these new advertisements lest they might be overlooked, and just say that we have used these books, all of them, in our school for years, and have done more teaching from the *Practical* and *Higher Arithmetics*, and the *Sixth Reader*, than we ever did from all other books of the same grade put together, and we do n't know where books that will give better satisfaction can be found; and, next —— time, when we feel more in the humor, we will write the notice. B.

ILLINOIS TEACHER.

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"MATHEMATICS OVERRIDES EVERY THING."

I TAKE this sentence from the report of Charles H. Allen's address on Teachers' Institutes, delivered Dec. 27, 1861, before the Illinois State Teachers' Association. Dr. Willard reports Mr. Allen as having said "In Wisconsin I have found that we are running to seed in one direction: mathematics overrides every thing. In some schools little is taught but mental arithmetic, written arithmetic, and algebra: and I have found young men who could not read intelligently nor intelligibly who were spending their whole time upon mathematics."

These words suggest a wide field of investigation. This field covers the whole ground of the theory of education. The great leading thought among educators nowadays is 'harmonious development'. The human mind moves in cycles in the individual as in the race. This fact should show the apostles of 'harmonious development' that possibly it is impossible for the mind to be deeply absorbed in several subjects at the same time. We should not become croakers when we see that the subject that is uppermost in our minds does not happen to be in the ascendant in the minds of others. The next wail that we shall hear from Wisconsin, when elocution shall be at the flood, will be that declamation and composition override every thing: that all the boys are looking to the legal profession and to Congress, or to fame through a popular ministry, and the girls to renown through Woman's-Rights Conventions; or that young men who can not 'intelligently nor intelligibly' calculate the interest on a note are spending their whole time in learning to read and declaim.

I have no idea that our educational systems will very soon be changed in their fundamental principles, nor can I say that I hope

they will. Notwithstanding this, I can not admit the truth of several of the common arguments that are mainly relied on to sustain our present scheme. The excuse that is put forth for the study of mathematics is 'mental training'. How much exercise would we get out of a man who needed it, if we were to set him to work to cut a log into two with a wooden ax merely for the sake of the physical training? I may be asked on what grounds I would advise the study of languages and mathematics if not for mental training. Languages should be studied to ascertain their structure as exhibiting the mode in which different people have displayed their mental growth, and for the thoughts and facts treasured up in them. Mathematics should be studied for the information contained in them. Knowledge is the food of the mind. Who ever heard of a man that ate two kinds of food during several years for the express purpose of training his digestive organs for a different kind of food ever after? It is equally foolish, then, to say that languages and mathematics are studied for the mental training alone. They should be studied for their own sakes. The Wisconsin teachers are no worse than Plato was when he posted up over the door of his academy "Let no one ignorant of *geometry* enter here." By geometry he meant *mathematics*. So high have the mathematical sciences stood in the eyes of civilized nations that they have chosen to call them *learning*: the word *mathematics* signifies *learning*.

Here arises the question Should students spend several terms or years in studying subjects that they never expect to give any attention to after leaving school? This is a grave question, and I hesitate about the proper answer to it. I think no man has ever become a better reasoner on moral subjects for having studied Euclid. Laplace, one of the greatest mathematicians that ever lived, failed as an officer of state. It is a great mistake to suppose that the study of geometry will make a student a good reasoner upon any other subject. He may be a good reasoner upon any subject; but the fact must be accounted for on a universal mental adaptation. Many persons suppose that a mathematician is a fool upon all other subjects, that he has scarcely sense enough to earn his living unless he has a professorship to support him, that he has no humanitarian feelings, indeed that he could not even marry for love. All this may be so in some cases; but it no more establishes the rule that a mathematician may not be a good, sensible citizen, and even a lover, than the fact that the celebrated naturalist Agassiz could not be brought to 'comprehend the product of two by two when both of the twos were negative' establishes the rule that no great naturalist can comprehend mathematical analysis.

A harmoniously-developed man would be a great curiosity. Barnum could make a fortune in exhibiting him before Teachers' Institutes, State Associations, School Boards, among the educated generally. Taking a certain unit of measure adapted to each quality or acquisition, we would have the following equations:

Strength of body=power of mind; sense of touch=sense of smell=sense of taste=sense of hearing=sense of sight; agility of body=activity of mind; skill in boxing=skill in argument; his knowledge of Greek roots=his knowledge of vegetable roots=his knowledge of mathematical roots; etc.

Such a prodigy would not dare to pursue one line of investigation too long, for fear he would become unbalanced. Have the great advances in the world's progress been made by harmoniously-developed men? I leave this question unanswered, and recur to the assertion already made that the human mind moves in cycles in the individual as in the race. This fact will explain the reason why at one time one subject is uppermost in our schools and at another time another. I have seen this exhibited again and again in an experience of seventeen years.

The thoughts presented in this article are thrown out to provoke investigation, and not to indicate my theory of education. I will say, however, that I think any careful student of his own mind will admit that when he is engaged in the study of several subjects but one of them can be absorbing, and that when this is so the others are only relaxations.

W. D. HENKLE.

LEBANON, O., Jan. 30, 1862.

THE TEACHER AND THE STATE.*

UPON one of the hills of ancient Rome stood the Temple of Janus, whose doors were always open in time of war. History tells us that so continually were the people engaged in warlike excursions that the doors of this temple were shut only three times from the foundation of the city to the Christian era; and from the time of Numa to that of Augustus — a period of nearly seven hundred years — they were closed only once, and then for but a brief period.

In strange contrast with the great republic of antiquity stands that of modern times. During the life-time of our government the gates of war have been so perpetually closed that, as a people, we are entirely unskilled in its arts and aims. Her resources and the energies of her people have been developed almost entirely in a peaceful direction. One year ago she stood high in position and influence among

* A lecture delivered at the November session of the Chicago Teachers' Institute, by S. H. WHITE.

the nations and the empires of Europe looked with admiration, mixed with envy, upon the rapid rise in power and wealth of the young American Republic. That single year has brought a sad, a humiliating change, which well invites to earnest thought every patriot citizen and lover of a free government.

As to the one great political cause of the present war, both sections and all parties are agreed. But are there not other causes lying back of this which have been at work silently, imperceptibly yet powerfully, to produce the present results? From the days of our nation's infancy has there not been growing among her people a greedy ambition for place, which has not scrupled to sacrifice all honor and integrity, and resort to the basest corruption, to secure its gratification? Have not her citizens lost sight of the noble zeal, the true patriotism, the self-denying sacrifice for the good of the cause, the unswerving devotion to principle, of our ancestors; and, in their stead, allowed a bigoted adherence to party so to blind their eyes and bias their judgment that they are unwilling to see, much less to recognize, any thing of good in their adversaries? And has not this unwillingness ripened into an inveterate hatred, till a pretended zeal for their country has only cloaked a real zeal for party, and they have set up for their motto 'our party, right or wrong'? Has not corruption crept into every place of power or wealth, till it is the crying sin of the times? Is there among us a strict adherence to the right and an unspotted integrity of purpose and of action, which should characterize a free people, every one of whom is a sovereign, in whose hands are committed the safety of our institutions? These vices appear most conspicuous among those in position and power; but are not they the servants the people? Every government adapts itself to the governed, and in no case is it so entirely what the people make it as in our own. That these things exist in high places is evidence that they exist equally, though not so prominently because to a less extent, in the sovereign people, whose gift these places are. The servant can not be above his master: the stream can not rise higher than its fountain.

Here, then, I find the causes which have been at work silently and powerfully upon our people from the foundation of our government to produce the present deplorable results; and as a class who are most directly brought in contact with the growing mind of the nation, and in whose hands are powerful influences for moulding its future public opinion, there are none who can do greater service to their country or to humanity than the teachers in our public schools.

Your attention, then, is invited to a few thoughts based upon 'The Relation existing between the Teacher and the State'. In order that we may more fully value this relation, let us first inquire into the extent to which it actually exists. From computations based upon educational statistics of the years 1850 and 1855, it is ascertained that the part of the population of the United States which actually attends school in course of the year varies from twenty-nine per cent. in the State of Vermont to only three per cent. in the State of Virginia, and that an average of eighteen per cent. of the whole population of our country come directly under the teacher's instruction during the year. This estimate does not contain the States of Florida, Arkansas, and Texas, of which I have not been able to obtain the statistics. Successive reports from the same State show that this number is steadily increasing, and of course the extent and responsibility of the teacher's influence is similarly increased. In 1850 only fifteen per cent. of the population of the State of Illinois were enrolled in the public schools, while in 1860 the number had increased to twenty-eight per cent., or nearly doubled. In our own city seven per cent. of the population was the average number belonging in the schools in 1860,

being an increase from only four per cent. in the year 1850. Thus we see that in our whole country more than one-fifth, in our State seven twenty-fifths, and in this city over one-seventh of the population come under the teacher's instruction in course of the year. When we consider that the teacher's care is extended over so large a share of our people, in most cases for years, and in very many through the whole period of early youth, then we may realize more fully the powerful influence he wields in moulding the popular mind of the nation. Other considerations press upon us to place the same point more prominently in view. Of the youth of our land but a very small fraction indeed ever attend any higher institutions of learning, where the principles of government or the duties and responsibilities of citizens are taught. There are no other places than the public schools where the masses may be taught the history of our Constitution, the sacrifices it cost and the precious privileges it guaranties to the people. There are no other places where they may so well learn to appreciate the noble gift of freedom enjoyed by the American citizen, and that this inheritance can be preserved only by an intelligent and honest exercise of the rights of citizenship. The public schools are the people's colleges, whence the youth of our nation go forth with all the training that they ever receive, to become the sovereign people in the freest government on the earth: to become the servants of that people, in whose hands will be reposed trusts and responsibilities which run parallel with the life of the nation itself.

Do you look for a harvest of rich clusters of luscious fruit? You will expect it only from a generous culture and a constant and careful pruning of the vine from the seed to its maturity. Would you have an intelligent and free people, judiciously administering the principles of self-government and fully appreciating its blessings? Look to the public schools of that people, the nurseries where are planted and developed the germs of republican institutions. Other places of learning exist, where a fortunate few may reach a higher culture, through which they can wield a greater power; but thus far the temptation to pervert this power to selfish or party purposes has shown itself too strong to be resisted by men in high places. It is this very disposition to pervert power on the part of those in whom it is intrusted, assisted by the blind partisanship of the more ignorant and unreflecting portions of the citizens of our country, that has originated and fostered through a course of years a spirit of corruption in the various departments of state, till the fostering canker can no longer be concealed, but has broken out into this open rupture — this disgrace upon the otherwise fair fame of our nation. That government is best whose rulers are actuated by a wise and humane policy; and inasmuch as with us each man is a sovereign, it follows that the state reaches its greatest success only by an enlightened and liberal culture of all her people. In order more fully to appreciate the responsibility of the teacher's profession, let us look for a moment at the high prerogatives of the American citizen: in other forms of government, where the people are more or less completely subject to the ruler, where they are called upon only to obey, it matters not that they should be familiar with affairs of state; that their minds be incited to free thought by a liberal culture, or that they be skilled in the various arts and refinements of life. The tendency of power has always been to discourage any attempts at improvement on the part of its subjects; and it is only where the slowly-awakening mind of the masses has from time to time risen in its might and demanded its rights that they have been conceded; and governments have been modified always to the increased happiness of the people.

The offices and duties of the American citizen are as far above those of any other people as is the ruler above the subject. He feels, or should feel, that he is a part of the government itself; that upon him devolves a share of its responsibilities, and in his keeping are intrusted its honor and good name. The idea seems to prevail that with us, as with monarchies, the government is central, and that having once settled in a certain line of policy it may be dismissed from the popular mind and go of itself. Few seem to realize that it is as extensive as is the territory of the nation, and that wherever there is a citizen of the republic there is a part of the republic itself, and that part is honored or disgraced as he is worthy or unworthy. Who are they that frame our laws? The people at the ballot-box. What determines the excellence of those laws? The character of the people. And how do we judge the character of the people? By the intelligence, virtue and good morals of the individuals.

Not only is it his privilege to frame the laws, but he is called upon to execute and construe them. Almost every office of the state is one of popular choice; and our past history shows us the uselessness of all speculation as to the cast of the lot. When called by the suffrages of his fellows to a position in the government, he is still further honored with their confidence, which may be equal to that of the state or nation itself. Then he holds in his hands their honor and reputation if he be fit for his place, or if unfit their disgrace and their shame.

With these high duties of the citizen there are corresponding privileges. The whole broad field of mental development is spread before him, inviting him to wander in whatever direction he may. All trades and professions are alike open to him, with only the competition and generous rivalry of those standing on his own level and dependent for success, like himself, upon their own unaided energies and resources. Not born to any titled honor or place, he measures himself by his own exertions and wears the laurels of his own successes.

With these high duties resting upon them and these privileges extended to them, there is a vital necessity that the American people be properly educated to rightly perform the one and appreciate the other. It is of vital consequence because the very life of the state itself depends upon it. There can be no universal ignorance; and as emphatically there can be no two classes, part educated and part ignorant. Bribery and corruption, and appeals of cunning and crafty politicians to the prejudices and jealousies of the uneducated, go too far in determining the character of our laws to allow of their being a safe element in our government.

This being the case, what method should education in our country pursue to best prepare the people for the safe exercise and enjoyment of self-government. Our whole experience as teachers has led us never to expect from pupils that which they have not learned. So in active life. The man of business trusts his ledger only in the hands of an experienced accountant, nor will he place the yard-stick in the hands of one who has not served the proper apprenticeship. In all departments of life we take pains to secure the best of talent for every service, and wisely so. Why, then, in transacting affairs of state should we feel so indifferent as to the capacity of the public servants? Why should the great mass of the youth of the land, as they go forth from our public schools, go ready for the common business of life, but so utterly unacquainted with the principles of our government, with its machinery, with the laws of the land, and with the rights and duties of a citizen? Can we call their education complete when, from ignorance, they become the easy instruments of political hucksters, making the birthright of

the citizen a thing of bargain and sale? and if called to office, they from the same cause become the pliant tools of the cunning and the crafty, by which the state, in stead of being a thing of the people and a people's blessing, is turned to a mighty engine in the hands of a few for defrauding them, and some times for their oppression.

The following words of the late Justice McLean are so applicable that I quote them. He asks "Are there no duties which a student has to perform except those which relate to his profession or trade? Does he owe no duties to his God and his country? If he be left to learn them when he shall be called on to exercise them, why instruct him in the business or profession which he is to prosecute? Why may he not learn this when he engages in it? If the reply be that this knowledge is indispensable to his interest, I would inquire whether a knowledge of his political duties and rights is not equally indispensable to a discharge of them. And is not the interest of the public superadded to his own in the case, to outweigh a mere personal interest? Can there be any just comparison in the two cases? And has not the attention of teachers and parents been chiefly, if not exclusively, directed to the lesser interest to the neglect of the greater?"

He further adds "The elementary principles of government, which are easily understood and communicated, should be taught in our common schools. The responsibility under which each public functionary acts should be shown, and how he may be called to account, and also that he holds a trust which he is bound faithfully to discharge, in conformity to the laws and with a single eye to the public good; and that every prostitution of this trust is an abandonment of principle and weakens the moral force of the government. The qualifications required for an enlightened discharge of public duties in the various offices established should be clearly stated, and, above all, the political rights and duties of every citizen should be inculcated as constituting the foundation of our political system, and that it is only by a vigorous and untiring discharge of these duties that the government can be maintained and preserved in its original purity."

At such a time as this, when the success of our institutions is put upon its severest trial, when the state calls so largely upon the patriotism of the citizens to shield her from the impending blow, it is well to consider whether such words as these, coming from one who long wielded a strong arm for the support of the government, and whose purity and integrity as a high judicial officer are above reproach, are not full of import, and whether we, as teachers, may not serve our country best by adopting their suggestion. The Constitution is the charter of our liberties. Put it in the hands of the youth of the land: teach them to understand the rights it guaranties and the grant it conveys, and they will be slow, when it falls to their care, to bargain it away or to see it torn and trampled upon by conspiracy or rebellion. There are few at the present day who do not concede that a nation can reach a high place of wealth and power, that she can exert the greatest influence upon the world, only as her mind is cultivated and her intellect strengthened. The world's past history furnishes abundant evidence of this. Those nations which have the brightest annals on the historic page are the ones where learning was most liberally encouraged, where the sisterhood of science, literature and the arts were patronized: and as the more liberal patronage of one nation lured them from their home with another, so one nation rose and another fell. The history of our own times affirms the same fact. Those nations of the world that rank first in power have the most liberally-educated people or have patronized most extensively the arts and sciences; and those that are first have risen

most rapidly according as, with an enlightened policy, they have devoted their energies to the improvement of the condition of the masses of their people; and it is a significant fact that the forms of governments and laws of nations have generally been changed only as the increased culture of the people has enabled them to know their rights and demand them, thus showing that education has been the *cause* rather than the consequence of an improved form of government. But while we read this evidence in favor of the elevating influence of education, we must not shut our eyes to that other testimony furnished by the same record, viz: that intellectual culture alone will not insure the lasting prosperity of a nation. From the similarity of their governments to ours, ancient Greece and Rome furnish the most instructive parallels. The time that heralded the downfall of each of these nations was its golden age. Literature and its attendant refinements had reached that high point of excellence which has made them models for all subsequent times. At that time Greece could count upon her greatest orators, philosophers, poets, and historians. Demosthenes led the popular ear captive by his eloquence: her groves and academy were made sacred by the teachings of Plato, Aristotle, and Socrates; while Herodotus and Xenophon wrote her history. Rome had her Cicero, her Livy, her Horace, and her Virgil. But while these minds existed among the people, the glory of their respective ages, the seeds of dissolution had already been sown in their governments by the luxury, profligacy and licentiousness of the one, and the venality and corruption of the other. The fall of those republics should be a solemn warning to our own. Should the experience of self-government here being tried be successful, success will not come from our wise Constitution and excellent laws alone, nor will it be the result of the mere intelligence and education of the people, nor of both combined. Other powers must be cultivated, which shall give right direction to the intelligence, that it may appreciate our privileges, that it may support and strengthen the state, and not abuse and destroy it. Intelligence may be applied to evil purposes as well as good, and when so applied it is more active and zealous in its efforts. It may make a greater villain as well as a good citizen. A passive consciousness of the right and a conviction that it will prevail, without effort to sustain it, has given the cause of error many a victory which had been prevented by vigilance and a little effort on the part of its opponents.

Honesty, virtue and integrity must be cultivated in the minds of the American people to guard against the abuse of their intelligence: and here we are brought again to our public schools. It is useless for us to set up that the good precepts which we inculcate will be obliterated when the scholar goes into active life; that a love of truth impressed upon the infant mind will not influence the boy when he has grown to be a citizen and taken upon himself a citizen's duties and obligations. I go further than this. We may not say that the various practices of deception and falsehood and corruption which one political party charges upon the other, which are charged upon almost every public officer, which every business man guards against in his transactions with his neighbor almost as if he were dealing with a rogue,— we can not say that these things are not the results largely of our defective system of education. The responsibility comes to our own doors and there it rests. I had almost said that the evil was not one of simple omission, but that our school-room systems and customs are such as silently to encourage in our pupils practices closely related to these, so that unconsciously they become a part of their education. Causes trivial in themselves frequently lead to important results. Travelers among the Alps tell us that at certain seasons a breath of air set

in motion by the shout of a mountaineer will shake from the cliff an icicle, which, falling down the steep sides of a mountain, gathers to itself coating of snow, till it finally becomes the fearful avalanche which in its downward progress sweeps every thing before it.

High up upon the mountain-side is a little rivulet whose course the human hand may turn and lead through the barren desert, which by its fertilizing influence it will change to green meadows and fruitful fields, or it may be precipitated into the thicket below adding to the wildness of the scene. So the infant mind may be led by the teacher's influence to a course of usefulness and honor, or by sufferance it may fall into a career of disgrace and infamy. Are there not slight errors on the part of our pupils, coming frequently under our observation, which are allowed to pass unnoticed and which are thus approved? Being thus passed over, the scholar indulges further in the habit, not thinking it wrong because unchecked, until in a little time it has grown to be a glaring fault, calling for all the ingenuity of the teacher to correct, and then with but indifferent success. Are there not little misrepresentations and deceptions daily coming to our knowledge, which we silently pass by, which become a sort of custom in the school-room and which cling to the scholar in after business life? Do not our school-room regulations place before our pupils too great temptation to concealment and misrepresentation, and do we not know of their yielding to this temptation day after day, without removing it from them or making scarcely an effort to strengthen them to resist it? If such be the case (and I think that in candor we must admit that it is too much so), what wonder that in active life the citizen shall think it no wrong to consult his own interest at the expense of honesty, or that corruption shall walk hand in hand with power. I make these suggestions not in a spirit to decry our system, but to call attention to its defects, hoping that some means may be devised for their removal.

Aside from the silent encouragement of injurious habits on the part of pupils, let us inquire how much time and attention are given to the cultivation among them of a love of truth and integrity. We have seen that these traits in a people are as necessary as mere intellectual culture. The same authority before quoted says "Intelligence without virtue increases the amount of evil; virtue without intelligence can oppose no effectual resistance to political corruption." But do we give the same time and attention to the inculcation of correct precepts and the formation of correct habits, and to the cultivation of good morals, that we do to mental culture? Do we pause as long and labor as earnestly to detect, explain and correct a little misrepresentation or deception as we do to secure a complete mastery of a principle in arithmetic or a rule in grammar?

Our aim is as far as possible to fit the pupil for the duties of active life. We familiarize him with the various rules of business and the customs of trade; but it may be doubted whether we sufficiently caution him against the snares which will be thrown out to decoy him to ruin, or the tricks of trade which are the resorts of the crafty and dishonest; whether we make a sufficient effort to inspire in him a detestation of such practices, and to impress upon him a notion that honor and integrity are the stepping-stones which lead to success in business and respectability in the business world. He is familiar with all the phases of a rule in arithmetic, but are its dishonest applications pointed out, and is the endeavor made to show that dishonesty, even though it be of a mild form and sanctioned by custom, is the cloak which covers the whole family of greater sins — bribery, corruption, and treachery?

In teaching history, is not the object sought defeated by stopping with the mere recital of the facts, without referring to causes or pointing out the more obvious lessons it teaches? In the daily events of life many opportunities occur for giving a salutary moral lesson, or of strengthening good resolutions. Good deeds of their own number may be noticed and held up as examples for the imitation of the young. If human nature were less selfish, and more frequently noticed the good in humanity, the world would be the better for it. If the press turned its activity and energy to gathering up and presenting the noble acts and generous deeds of men side by side with the records of the criminal courts, how much more earnestly would they emulate the one and shun the other. Every opportunity should be improved to point out to our pupils their wicked customs and bad habits, and warn them of their evil and destructive tendencies.

A large and very elegant class of people object to such a course, holding that the young will learn enough of deception and vice at best, without exposing it to them, not remembering that, sooner or later, they will be brought under their influence, and that they may best defend themselves against a foe of which they have been forewarned. The tree that stands upon the hill-side has grown sturdy and strong and tosses its branches in defiance of the winds and storms to which it has been exposed through its growth; but the one transplanted from the forest, where it has been protected in its growth, is snapped from its stock and made the sport of the raging tempest. I believe that if our government ever makes for itself a history among the nations it will not be by reason of its free constitution and wise laws alone, nor of the intelligence and intellectual culture of its people, but as much on account of their purity of motive and of action. Our government is based upon principle, its founders were men of principle, and its safe keeping can be intrusted to no unprincipled hands.

Having mentioned these elements of the education of the American people as essential to the perpetuity of our government, the question arises whether they are all that are necessary. Without answering this question at present, I may say that they are not all that are desirable. Thus far nothing has been said of the child's moral nature, which is a part of him as much as his intellect, and which we as teachers, having in charge his education, ought not to overlook. A man may have extraordinary intellectual attainments and high mental endowments; but with these alone he will be like the tree with only a luxuriant growth and brilliant foliage. He fails to answer the high purposes of his being. Many a man of respectable mental attainments lives through the world and dies, and the world is no better for his having been in it. He may have amassed wealth; no one can accuse him of dishonesty or falsehood; no one can say that he has done any harm: yet his loss is not noticed. The question is Did he do any good? Has he done any noble act or good deed which should entitle him to a place in the memory of a grateful people, or even of a single individual? If not, then his life has been that of a mere animal.

Society is composed of individuals who are more or less dependent upon each other; and on account of this relationship each is bound to contribute what he can to the happiness of the whole. The selfish part of human nature should be discouraged and an interest in the welfare of others cultivated. The memory of good deeds is a sweet incense and a fountain of perpetual gratitude in the heart of the recipient. The world will never suffer the act of the Good Samaritan to be forgotten, while it will remember him who 'passed by on the other side' only to condemn'. Yet it may be feared that there is a want of activity in our course of in-

struction in this particular. We teach the scholar that it is wrong to do harm, but do we dwell upon his duty to do good, and that he should seek to do the latter as earnestly as he would avoid the former? In no case is there so good an opportunity for developing the virtues and amenities that make life noble and pleasant as in the constant intercourse of scholars in the labors and pastimes of school. It may be said, too, that with no one is there so great a necessity of a constant care and watchfulness in this respect as with the teacher. There are among our pupils some of abandoned habits, of corrupt morals, and who are proficient in all the petty crimes that prove the early ruin of so many youth. There are others whose childhood had been spent under the purest of home influences. Who of us can not recall some one whose purity, gentleness and simplicity make him the loved and admired of all, and whose very presence casts a sunshine and cheerfulness upon all around? Such are placed under our care with the confidence that they will be kept free from the bad habits and polluting influence of their more vicious associates. There is an urgent necessity of greater attention to this feature of public instruction, from the fact of an entire neglect of any thing of the kind on the part of parents in those cases which are the most marked. There are many parents who are utterly unconscious of the rapid strides to ruin which are being taken by their children, and it is with equal surprise and pain that they learn of their vicious and destructive habits. There are others who are so blinded to their children's faults that they can not see them, or if they do are ready to see some palliation or excuse. But to the teacher they become apparent: and should we be content with any thing short of an earnest effort to reform them? Whatever course we pursue we may be assured that, as sure as the leaf follows the unfolding germ, or the fruit the flower, so sure will the wicked traits fixed in the youth through neglect, or the good habits formed by our care, characterize the citizen in after life.

Thus far I have said nothing of the necessity of religious instruction being embraced in our common-school system. This has been because freedom of religious sentiment is the privilege of every one, and because an entire separation of church and state is one of the foundation principles of our government. But when our Constitution says that every one shall be left free 'to worship God according to the dictates of his own conscience', it can not intend to open the door to admit every mischievous theory and vicious custom under the garb of religion; it can not be intended to patronize all forms of irreligion and infidelity, which tend to the subversion of every good government, and which would work its own destruction.

It is to be observed, too, that our forefathers were God-fearing men and religious to the strictest degree. In the first provisions for the education of their youth they made prominent an instruction in the principles of piety, justice, and a sacred regard to truth, love to their country, and those other virtues which are the ornament of society and the basis upon which the republican constitution is structured. To suppose that men holding such views as these would found a government shutting the door to religious instruction in public schools would be a libel on their whole lives.

In a lecture before the American Institute of Instruction Dr. Humphrey says "Without moral principle at the bottom to guide and enrich its energies, education is a sharp sword in the hands of a practiced and reckless fencer. I have no hesitation in saying that, if we could have but one, moral and religious culture is even more important than a knowledge of letters, and that the former can not be excluded from any system of popular education without infinite hazard. The

more virtue you can infuse into the hearts of your pupils, the better they will improve their time and the more rapid will be their proficiency in their common studies. The most successful teachers have found the half-hour devoted to moral and religious instruction more profitable to the scholar than any other half-hour in the day; and there are no teachers who govern their schools with so much ease as this class. When you can get a school to obey and study because it is right, and from a conviction of accountability to God, you have gained a victory which is worth more than all the penal statutes in the world; but you can never gain such a victory without laying great stress upon religious principles in your daily instruction. There is, I am aware, in the minds of some warm and respectable friends of popular education an objection against incorporating religious instruction into the system as one of its essential elements. It can not, they think, be done without bringing along with it the evils of sectarianism. This objection supposes that if any religious instruction is given the distinctive tenets of some particular denomination must be inculcated. But is this at all necessary? Must we either exclude religion entirely from our public schools or teach some one of the many creeds of the various religious demonstrations? Surely not. There are certain great moral and religious principles in which all denominations are agreed: such as the ten commandments, our Savior's golden rule, every thing, in short, which lies within the whole range of duty to God and to our fellow men."

What sectarianism can there be in teaching the principles of moral law, love to God and love to our neighbor? Man is a religious being; and to neglect his religious instruction is to omit that guiding and controlling power which will direct his aims to the accomplishment of the most good through life.

Fellow teachers: I have briefly alluded to some of the necessities of our system of popular education, not because they are recent in their origin, but because the tendency is to limit the meaning of the term education to the intellect, to the neglect of the whole man. In our zeal to secure the greatest proficiency in the branches taught from the text-books, we lose sight of every thing else. Without dwelling upon the popular expectation, which to a great extent makes this a necessity on our part, let us ask Is it right? Is it right that the youth under our care should be trained up and sent out skillful, living machines, having the power of self-action, but without the capacity or the principles to direct the action to wise purposes? Suppose that they could all become intellectual prodigies: does that alone fit them to perform their duties to the state, to society, and to their God? Would not such a fact make the necessity of a higher moral culture still greater? Ours is a higher mission than simply to teach the rules and principles laid down in books. It is to encourage the good, to suppress the bad, to train up the citizen, to develop the noble and godlike in humanity; in short, to educate the whole man. And though a complete success may not crown all our efforts, let us labor on, ever strong for the right; and when we leave the teachers' ranks let it be said of us that we did all we could.

Reason, rebelling, armed 'gainst Love one day,
And 'Wisdom' on his banner blazed o'er head:
Love sent a breath to make the attack, they say,
When Reason, trembling, spiked his guns and fled.

Ruckert.

COMPOSITION-WRITING.

"Oh! but I hate to write compositions! I do n't see what use they are, any how!" is the indignant comment of many a despairing student, as the labors of an expected essay loom up in terrible prospect. What ominous associations of all that is hard and mysterious the very word seems to carry with it! And we can not say that we wonder much at the fact; for the plan often pursued is certainly not calculated to throw a fascination around the exercise. When we went to school we were required to hand in compositions every two weeks, on any subject we pleased; and it was really an intellectual treat to hear the contributions offered on the occasion. As they were short, and written in easy English, we remember some of them:

The Pig.— The pig is a very useful animal. In the summer he gets fed on coffee-grounds, dish-water, and turnip-tops; but in winter, when they want to fatten him, they give him corn. His meat is good for food, and makes nice sausages. He is lazy, and is covered all over with bristles, with a long snout. A few pigs have their tails straight, but most of them are curled.

The Cow.— The cow is a useful animal. She gives us milk, out of which we make butter and cheese. When the cow is old and her teeth are bad, they fatten her on meal. The cow eats grass, corn-fodder, and pumpkins. Some cows are red, and some are black.

School.— School is the place where we go to learn. At school we learn Geography, Grammar, Reading, Writing, and Spelling. Some boys do not like to go to school; but they will be sorry when they grow up to be big, and wish they had not played truant when they were little. Some boys behave bad, and then the master must dress them. Every one should go to school when they are young, for when they are old they ca' n't.

These efforts, of course, fall under the genus *Composition*, but just as well under the genus *Nonsense*. The object of the exercise of composition, as we take it, is the development of independent thought and original expression; but how these ends are to be secured by the pupil's uttering common-place remarks about the domestic animals we are unable to see. "Oh!" exclaims some oracle, "you do n't expect children to take abstract subjects and analyze them like a Carlyle? Isn't it better to let youngsters write on any thing rather than not

write at all? Why, sir, the very secret of successful writing, or rather a primary *sine qua non*, is the selection of a topic we understand, not one beyond our grasp."

We humbly acknowledge the justice of the objection; and if a teacher sees fit in the case of beginners or mere children to grant the untrammeled range of the barn-yard for themes, and is satisfied with a careful summary of the economical qualities of its inmates for compositions, we shall not challenge his judgment. Our point is simply this: In promiscuous country schools, where the scholars are of all minds and ages, it is not best, as a practice, to require them always to find their own subjects; at least, such has been our experience. At any rate, we have seen two disadvantages arise from it: first, plagiarism becomes easy. Pupils of lazy habits and obtuse consciences soon discover that books at home contain pieces decidedly superior in literary merit to any they could produce, and also that said pieces may readily be transferred to foolscap and look, in their own hand-writing, like domestic manufacture. It will be argued, we know, that a teacher of any penetration can detect any such little irregularities; but not always, for pupils of this style are often cunning enough to appropriate just such pickings as shall seem possible to their mental calibre. Secondly, scholars in this very way of being left to themselves acquire that distaste which so many of them never survive. They sit down by the table and prepare to write. Fifty different things pass in review before their minds in as many minutes, and each is summarily dismissed before it is sufficiently pondered to suggest what ideas they may really have about it. Despair stares the poor souls in the face; and to avoid failure, as a last resort, parental genius is invoked. "Oh! mother, I must have a composition to-morrow, and I don't know what to write about. If you don't help me I won't go to school, that 's all." So maternal sympathy gives a theme, maternal thought evokes the ideas, maternal rhetoric rounds the periods, and Anna Maria trots to school next morning in fine spirits, for the agony is over: besides, she *wrote* the piece herself; her mother just helped her a little. Besides, on this plan, the same subject may be used *ad infinitum;* for let one pupil select some happy topic, whose reading creates a sensation and which seems to promise an easy treatment, and it is very probable the next composition-day will witness several duplicates; ten to one but the theme, in some shape or manner, may be engrafted on the programme of essays for the entire term.

That composition-writing is a bugbear with children generally, an ordeal they would gladly get rid of, may doubtless be considered as evident as the axioms. It is our opinion that this disgust proceeds part-

ly from the manner in which the exercise is commonly presented; and it shall be our aim in the next paper to endeavor to show how the dose may be made more palatable. W. W. D.

STERLING, Ill., January, 1862.

A B O U T "K E Y S".

THE feeling against answers in Arithmetics and Algebras occasionally outcrops here and there in the country, but is powerless to produce any permanent change. About nine years ago appeared Stoddard's Philosophical Arithmetic without answers; but its sale has been very limited, while that of his Practical Arithmetic with answers has been very extensive. Last year appeared Schuyler's Higher Arithmetic with the answers omitted to a great extent; but already is the author preparing the answers for the next edition.

It seems, then, that there are not teachers enough in our country who are opposed to answers to warrant authors and publishers in furnishing for their patronage Arithmetics without answers. As an author, I may be allowed to speak to some extent for the profession, and give the reasons why keys to mathematical works are published. Teachers are constantly writing to the publishers of Arithmetics and Algebras without keys that they would introduce the works if they had keys to help them out of the difficulties that might arise in their use. Hence publishers demand that authors shall make keys to their works to assist in extending the circulation. On the other hand, authors are disposed to yield to this demand in order to save the time that is consumed in answering letters calling for the solution of problems in their works. In some cases I have received letters of this kind from men whose reputation as educators is by no means confined to their own State. These facts will serve to show that there is some excuse for the publication of keys; and if answers were omitted from Arithmetics and Algebras these facts would acquire double force.

I have not in my experience as teacher seen any evil result from the use of mathematical text-books with the answers. It seems proper that students and teachers, especially those who are careless and indolent, should have these checks put upon them. A long exercise in obtaining accurate results can hardly fail to prepare a student to be accurate when left entirely to himself. When two business men calculate the interest on a note they feel better satisfied when their results

exactly agree. In most of the arithmetical operations in trade there are two parties who seek to obtain identical results. So does the student when solving an arithmetical problem seek to obtain the same result as the author. It is no fault of the answer that a pupil may "work *without thought*, as rapidly as possible, until it is thought that the desired figures should appear; then, if the answer should be right, to erase the work, *without thought*, or if it should be wrong, to erase the work just as quickly, and guess again."

The article in the February number of the *Teacher* from which this quotation is taken contains some good suggestions, and the writer is just such a person as could teach pupils well, notwithstanding his antipathy to answers. He should remember that, as yet, in the teachers' profession there is not one in fifty who, like himself, could safely dispense with the author's results as checks upon his ignorance.

LEBANON, O., Feb. 10, 1862. W. D. HENKLE.

SUNSHINE IN A BOTTLE.

AMONG the extravagances of expression to be heard, one hears occasionally of the impossibility of bottling sunshine. It is not an impossibility, however. The lamps which gives us light at night would lose their brilliancy, or rather would have none to lose, except for the *bottled sunshine*. This paper would hardly have been prepared except for the aid of the same bottled sunshine. Within a few years practical chemistry has brought many facts to the comprehension of the multitude which before were only known to the adept in his laboratory. Among these is the fact that our artificial lights, with which we imitate the sun, are really dependent on the same for their power, and are but faint reflections of the bright beams that dazzle our eyes at noonday. So far as the surface of the earth is concerned, although the internal fires modify the temperature, we may consider all heat and light as proceeding from the sun, and all life directly dependent on it. Thus we shall find the great kingdoms possessing vitality, viz., the animal and vegetable, directly dependent on the favor of the sun. Animals depend on vegetables. Some, to be sure, eat flesh, but the flesh they eat is ultimately supplied from vegetable sources. The animal needs to enjoy sunshine to be healthy, or even to live any length of time. Some try to live in the dark, or to endure the semi-darkness of polar winters; but debility and the dissolving scurvy give

warning shortly of approaching dissolution. Even could animals live wholly in the dark, as some may be supposed to do, they are not independent of the sun. The great vegetable kingdom needs heat for germination, and light and heat for developing growth. No careful girl puts her beautiful flower-bed close by the north side of a building; she could not if she would. The weak white potato-sprout of the cellar is familiar to every body who knows the green vigor of the same when supplied with light and heat. The great tree of the forest reaches high after sunlight and heat, while the plants that are outtopped are rendered feebler or altogether exterminated. The warmth of the sun is eagerly absorbed by the growing plant and transformed into fibre and tissue. Those regions of the earth that are deprived of the direct benefit of the sun's light and heat are at the extreme, mere wastes of ice and snow; and we pass through the development of vegetation as we pass through the increasing stages of light and heat, till vegetable giants and mammoths are reached in equatorial regions. Our corn is a greedy absorber of sunshine. It changes it into the material from which chemical analysis will bring oil, or which the farmer's live chemical workers will change into lard and tallow. Nature has a longer process, which is not less sure, only less speedy, than the transformation of sunshine through the corn, and ox, and candle, to the artificial light. Whence comes kerosene? Whence comes the heat for our machine-shops and manufactories? Long ages ago the sun poured his rays freely upon a world grown over with a rank vegetation, upon which animals had made little inroad. Huge masses of vegetable matter were by some means — great convulsions and upheavals, doubtless — buried together. By heat from the earth, which rather lessened than increased the amount of heating material in these masses, and by pressure, these great vegetable graves became our coal-beds, to which a resurrection is coming in these latter days. The vegetable origin of coal is plainly written on nearly every load that comes to our doors. The impressions of leaves, or the grain of wood, which has changed its appearance but retained its heating properties, can plainly be seen. We put this coal into our stoves and reproduce in some sort the heat and light which the plants of former ages absorbed, and which has been stored away for us, no man know how long. Or we place this coal in a chemist's hand. He produces a gas to light the cities, coal-tar to use in roofing, and still has heat left in the coke. Or he takes another process, and coal-oil is freely produced. This from some varieties, and after certain refining processes, is the pure unadulterated kerosene — *bottled sunshine.*

A very curious matter is the preservation of the brilliancy of sun-

light in this very same black coal and its oil. All are familiar with the bright-colored ribbons, different shades of which have been fashionable for two or three years under the names of Solferino and Magenta. The color of which those different shades are produced is call-*marcre*, and is extracted from *coal*, and is very costly. A very small quantity of *marcre* serves to give the required tinge to large quantities of material designed for coloring. The terrible battles of Solferino and Magenta, which cost so many tens of thousands their lives, have their memorial of blood and carnage in the color which the 'dirty coal', so called, has yielded up to add to the charms of woman within three years. What a history should we get from a lump of coal, if it could talk so that we could understand it, about its own changes from the day it was in growing plants till we take it from our stoves! Every lump of tallow, every pound of lard, every ounce of turpentine and resinous gum, every pint of linseed-oil, or whale-oil, or coal-oil, is but a form of condensed sunshine, easily bottled. S. T.

THE NEW ENGLISH EDUCATION MINUTE.

For some time past considerable dissatisfaction has been felt with the working of the existing scheme for popular education in England. If we can understand the case, the reasons for this dissatisfaction are two-fold. First: Government aid is afforded those schools, having a trained master or mistress duly certificated, which schedule a certain number of scholars within a given space. These provisions shut out from the receipt of aid the very districts which most require it. Small rural schools, having moderate pretensions, can not afford to pay the salary necessary to secure the services of the trained teachers, and hence are unable to participate in the benefits of the grant.

The operations of the second provision are similar; for, the districts being large, the attendance must, almost of necessity, be so irregular as to prevent any grants falling to their share, and so in many instances the burden of the schools has fallen, certainly in an undue proportion, on the clergymen.

Secondly: the great complaint has been of the ambitious character of the Government schools; that it is ridiculous to instruct children who will soon follow the plow or go into service in history, mathematics, chemistry, and the 'ologies'. The great cry has been, not that the children shall receive a finished education, but that they shall be

sent forth so instructed that 'reading shall be a pleasure, writing no painful effort, ciphering a useful acquirement'.

So powerful had become the opposition to the existing plan, that as long ago as 1858 a Commission was appointed 'to inquire into the state of popular education in England, and to consider and report what measures, if any, are required for the extension of sound and cheap elementary instruction to all classes of the people'. The committee were the Duke of Newcastle, *Chairman;* Sir John Taylor Coleridge; Reverends W. C. Lake and W. Rogers; and Goldwin Smith, Nassau W. Senior, and Edward Miall, Esqs.: men representing the Church of England as well as dissenters, modern thought as well as conservative.

This commission presented a very able report in the spring of the last year; and, avowedly founded upon that report, the minute now under consideration, establishing a Revised Code of Regulations, appeared in July.

Since the people began thoroughly to enter into its details, there has been growing an opposition to it, which bids fair to throw into the shade the opposition to the minute already existing. Meetings have been held, subscriptions raised to arouse the people against the proposed change: the operation of the new code has been postponed until this spring, to give Parliament an opportunity to express its opinion; and so widely has this opposition extended that it is now doubtful whether the matter will be allowed to come up before Parliament at all.

The grounds of this opposition are several, and we think are, most of them, exceedingly frivolous:

1. "The Privy Council, by doing away with the existing Government payments to masters, mistresses, and pupil-teachers, break faith with this whole body."

Not so. The grant has always been an annual one, liable at any time to be abolished; hence they had no business to regard it as a permanent income. The Privy Council transfer these sums to the managers of the several schools in which the masters and mistresses are engaged, so that the schools do not suffer from the change.

The transfer is no doubt abrupt, and it has been suggested that the grants be gradually withdrawn, or that a sufficient sum be allowed this year to enable these teachers to purchase annuities somewhat smaller than the grants now received.

2. "It would discourage the engagement of pupil-teachers."

The minute requires one pupil-teacher to be engaged for every thirty scholars after the first fifty, or the grant will be reduced £10 for every such thirty scholars having no pupil-teacher. The cost of a pupil-

teacher averaging £15 per annum, it is contended that £5 will be saved by failing to engage a pupil-teacher.

This is equivalent to saying that the managers would prefer to see their schools without a sufficient staff to work them to paying the extra £5. But a school full-handed would graduate enough more scholars to more than make up for the extra £5; for the managers are to receive capitation-money as a premium on all the scholars graduated. Neither would the £5, as mentioned above, be gained in any case; for the school must maintain a sufficient staff or receive no grant.

3. "Managers have always been trying to prolong the attendance of the scholars, while now a child can only pass once in Group IV so as to receive payment. There will, therefore, be no inducement for children over twelve to remain in school."

As indicated above, the children in England are divided in the yearly enumerations into groups according to their ages, and not, as with us, into classes according to their attainments. And since in the fourth or highest grade no scholar can be enumerated a second time, it follows that children between twelve and thirteen can receive no aid from the Government.

Children over thirteen can attend the night-school and receive pay from the Government; and the question may well be asked whether the Commissioners did not intend to transfer scholars from the day- to the night-school at the age of twelve, and whether the omission to allow aid was not an inadvertence, which can very easily be corrected.

The Commissioners in drawing the line at the age of twelve have, we think, acted with a regard to the wishes and necessities of the mass of the people whom they were appointed to benefit, which they could not well overlook.

Their idea is that independence is of more importance than education; and if the wages of the child's labor are necessary either to keep the parents from the poor-rates or to relieve severe and bitter poverty, it is far better that it should go to work at the earliest age at which it can bear the physical exertion than to remain at school. They argue that the position of many of the laboring poor is, of necessity, precarious: they are the first to feel changes in the state of trade, and may be suddenly reduced from comparative comfort to destitution, misery, and pauperism. They assert that it is a parent's duty not to forego an opportunity of providing for his child, reminding us that a child which is a burden to its parents is not likely to be well treated at home, while the influence of a kind home is as essential to the formation of a character as is that of a good school.

They further say that in their opinion "public effort should be di-

rected principally to increasing regularity of attendance, rather than to prolonging its duration."

We in this country know how exceedingly prone our common people are to take their children out of school and put them at work learning trades, etc. To such an extent, indeed, is this carried that in our large cities schools in certain localities find exceeding difficulty in having in their higher divisions a class of mind sufficiently mature to pursue the assigned grade of study to advantage, or to graduate with such an understanding of the branches taught as those who planned the schools intended.

The Commissioners do not, indeed, suppose that the education of a child is finished at the age of eleven years; but they affirm that the condition of the labor-market is such that the majority of the children are removed and will be removed at about eleven or twelve years; and knowing that the master, if he knows his scholar will leave when he is at that age, will try to advance him as much as possible before he reaches that period, they ask if it is not wise that legislation should proceed on the supposition that scholars will leave at that time, and regard the child remaining over the period as the exception.

4. "Infant-schools will be ruined."

The new code recognizes children of three years old and upward. Ought it to go lower? The state pays for education, not attendance. Are children under three taught any thing? Shall the school-room be a nursery? We think America might teach England a lesson on this point.

5. Lastly: "Religious instruction is ignored. Let the Minute be put in operation, and your schools will become schools of secular education only."

That such a question as this should be raised shows how far behind us in this respect is the mother-country. But is the objection pertinent? We think not. In the first place, the clergyman is usually the most active manager of the schools. He of course would see that the religious education of the scholars was not neglected.

Mr. Lowe, in the House of Commons, said: "The schools will continue to be denominational, and religious teaching must be the foundation of all. The inspectors will still conduct a religious examination. In short, there is no proposal to make any change in the religious character of the schools."

Article 8 of both the old and new codes stands thus: "Every school assisted from the grant must be either (1) a school in connection with some recognized religious denomination, or (2) a school in which, besides secular instruction, the Scriptures are read daily, from the author-

ized version." In both codes candidates for admission to the training-schools are required to produce certificates from the managers of the school they have attended stating that their *religious* knowledge is satisfactory to them.

The advantages of the Revised Code, as we see them, are three-fold:

1. It is more simple. Managers of schools are *managers* in stead of being obliged to correspond with the central office in London. The payment of grants is made in one sum in stead of in small amounts as heretofore. Hitherto managers, having with great labor mastered the Minutes and applied for books, apparatus, etc., have been bewildered by the returns they had to make, and the pledges they were forced to enter into. The old code had 257 articles; the new has 137. Must it not be simpler?

2. It is more general. Large schools will lose money; but it will go to a lower class of schools, which received none before, and benefit those who most need aid. To enable these schools to receive Government aid, pupil-teachers are, with certain limitations, allowed to teach inspected schools, and a fourth and lower class of certificates, including two grades, has been added to the former three classes.

3. It is more effective. Hitherto payment has been made by capitation-grant for attendance only. Hereafter the attendance must produce scholarship; for, in addition to good attendance, schools must have good scholarship, and to show this must pass a rigid examination. The night-schools will be aided, as capitation-money may be obtained for scholars attending a certain number of times and passing a certain examination. But, far beyond this advantage, the school-staff may be made use of in the night-schools, a thing not heretofore allowed.

But, as we before intimated, it is quite likely that the popular opposition will prevent the passage of the new code at present, and the realization of a scheme which would diffuse by new channels the blessings of knowledge to those localities which, under the present system, are dry and parched. J. W. O.

To trust religiously, to hope humbly, to desire nobly, to think rationally, to will resolutely, and to work earnestly,— may this be mine.

Love and a good dinner are said to be the only two things which change a man's character!

It is mediocrity that is insupportable to pride.

AN ARITHMETICAL PUZZLE.

I DOUBT not many of the readers of the *Teacher* are acquainted with a performance which looks very strange and even magical to a person unfamiliar with numbers, and which I have seen in some juvenile books. It is this: take any two numbers divisible by 9; add (or multiply) them; from the sum (or product) strike out a figure, and tell the other figures in any order to the person who proposes the puzzle, and he will tell what figure was struck out. Thus, you take 495 and 306, I being ignorant what you take; you add them, and tell me that after striking out a figure you have left 1 and 0. I say at once you struck out 8. Whatever figure must be used to make the sum of the given figures equal to 9, or to a multiple of 9, is the figure struck out. If 5 and 7 are given me, I say $7+5=12$; 6 is needed to make 18; therefore 6 was struck out. The peculiar properties of the multiples of 9 are so well known now to the students of our common arithmetics that I need not explain.

I have often amused myself and others with a variety of processes depending upon a few simple relations of numbers, such as any good scholar in our practical arithmetics can understand if he can extract the cube-root, but which are quite puzzling to most persons even if very familiar with numbers. I will give a few actual instances; the great puzzle is that I extract the cube-root, or seem to do it, with marvelous speed. I propose it as a problem to the readers of the *Teacher* to ascertain, by analysis of these instances, the methods used and the principles involved. In ascertaining them you may find out something useful to you. I was once in a school-room where the teacher had written upon the board the number 9,129,329, and the class were trying to find the cube-root of it. It occurred to me that I might, perhaps, by a mental operation ascertain the root, as the teacher pronounced it a perfect cube; and within a minute after I thought of it I said to the teacher "The root is 209." Following out my discovery, I soon found myself able to give, by mental operation only, and almost instantly, the cube-roots of all perfect cubes expressed by 4, 5 or 6 figures; and in the same way the cube-roots of one-tenth of all perfect cubes expressed by 7, 8 or 9 figures. What I discovered is used in the following examples, in connection with other processes and principles which whoso will may discover. I propose as the problem the discovery of the methods and principles used. I must say, however, that the operations in the 4th and 5th preliminary to the di-

rection 'cube the number' are based upon other principles and properties of numbers than those used in the 1st, 2d and 3d. I place the operation (which I do not see) alongside my directions.

I. Take some number expressed by three figures no one of which is a cipher; do not tell me what you take: write the number as a period of thousands, following it by the same number as a period of units: thus, if you take 413, you write 413413. Divide this number by 7; divide the quotient by any number under 10 that will leave no remainder; divide this quotient by any number under 10, as before; divide this quotient by 13. How many figures in the last quotient? *Ans.* "Three." Cube the number. How many figures? *Ans.* "Seven." Cross the middle three, and give me the others in their order, putting x in places of crossed figures. *Ans.* "6,5xx,x03." The number which you cubed was 187. (This answer I gave in four seconds after writing the mutilated number.)

Unseen Operation.
7)765765
5)109395
9)21879
13)2431
187
187^2=34,969
187^3=6,539,203

II. Take a number of three figures and make one of six as directed before. Odd, or even? *Ans.* "Odd." Divide by any number between 12 and 30 that will give no remainder; divide by any number less than 10 giving no remainder. How many figures in the quotient? *Ans.* "Four." What is the thousands' figure? *Ans.* "2." Subtract 1859. *Ans.* "Done; I still have four figures." Is the number even? *Ans.* "Yes." Divide by 2; cube the quotient number. How many figures now? *Ans.* "Nine." Beginning to count at units, put x in place of the 2d, 4th, and 6th, and give me as before. *Ans.* "129,x5x,2x6." The number cubed was 506. (Answer given by me in three seconds.)

Unseen Operation.
13)261261
7)20097
2871
−1859
2)1012
506
506^2=256,036
506^3=129,554,216

III. Taking three figures, make a number of six figures as before. If possible, divide by 8; subtract 8008; divide remainder by 13; divide quotient by 7. How many figures now? *Ans.* "Three." Is the number above 500? *Ans.* "Yes." Subtract 363; cube the remainder. How many figures? *Ans.* "Eight." Beginning at units, put x in place of the 2d, 3d, 4th, and 5th, and give as before. *Ans.* "73,0xx,xx2." The number which you cubed was 418. (Answer given in four seconds.)

Unseen Operation.
8)632632
79079
−8008
13)71071
7)5467
781
−363
418
418^3=73,034,632

IV. Take an even number greater than 20 and less than 100, and

Unseen Operation.
34
9
306
6
18360
−34
7)18326
2)2618
7)1309
187
187^3=6,539,203

multiply it by 9, and that product by 6; annex a cipher, and subtract the number first taken; divide the remainder by 7; divide the quotient by 2; divide the quotient by 7; cube the quotient now obtained. *Ans.* "Done, with seven places in the power." Then, beginning with the hundred-thousands' figure, put x in its place, and in every alternate place, and give as before. *Ans.* "6,x3x,2x3." The number cubed was 187; and the number taken at first, 34. (Answer given in six seconds.)

V. Take some multiple of 3 between 30 and 100; multiply by 9, and the product by 6; annex a cipher, and subtract the number first taken; divide the remainder by 7; divide that quotient by 7; divide that quotient by 3; cube the number obtained. *Ans.* "Done, with seven figures in the power." Put xxx in place of the middle three figures, and give me as before. *Answer*, 1,2xx,x49." There is a mistake in your work. *Ans.* "I think not: I will see. I have it now. I made a mistake in getting the cube. I now give you 9,1xx,x29." The number cubed was 209: number first taken, 57. (Answer in seven seconds.)

Unseen Operation.
57
9
513
6
30780
−57
7)30723
8)4389
3)627
209
$(209^3$=1,266,749)
299^3=9,129,329

In the fifth example I have given a real instance of error; the operator erred in multiplying 209 by 209: I did not know where the error was, but could say almost at once that there was an error. The variety of methods by which I obtain the number that I direct to be cubed is almost endless, as I never use the same method twice; but the principles are few that explain them all, and enable me to devise them extemporaneously.

ULYSSES.

MATHEMATICAL.

SOLUTIONS.—I (*January*). Since the specific gravity of iron is 7.788, two cubic feet immersed in water weighs 125lbs. (the weight of 2 cubic feet of water) multiplied by 6.788, which equals 848.5lbs. From this take 40 ounces, or 2.5 pounds, and we have 846lbs. as the amount to be buoyed up by the cork. One cubic foot of cork weighs 15lbs.; hence will buoy up in water 47.5lbs. Divide 846 (the num-

ber of pounds to be buoyed up) by 47.5 (the number of pounds a cubic foot of cork will buoy up), and we obtain as the result $17\frac{77}{95}$, the number of cubic feet in the piece of cork. M'G.

II. By a consideration of the motion of the hands, it will be obvious that in each case the minute-hand will be in advance of the hour-hand; while in the first case the second-hand will be behind the hour-hand, in the second case before the hour-hand and behind the minute-hand, and in the third case in advance of the minute-hand. Moreover, the second-hand must in the second and third cases have passed over more than the circumference of the dial. Again, the minute-hand moves 12 times as fast as the hour-hand, and the second-hand 60 times as fast as the minute-hand and 720 times as fast as the hour-hand. Now, whichever case we may be considering, the distance passed over by the hour-hand to reach the position required in that case may be reckoned as 1 unit; then the minute-hand will have passed over 12 and the second-hand 720 such units. Moreover, the hour-hand will in each case be 1 of the units of that case in advance of the twelve-mark, and the minute-hand 11 units in advance of the hour-hand.

In the first case, the second-hand, being 11 units behind the hour-hand, must lack 10 units of being at the twelve-mark. Then 10 units added to the 720 already passed gives 730 units as the circumference of the dial, or the distance the second-hand passes over in 1 minute. The question now is, If it take 1 minute to pass over 730 spaces, how long will it take to pass over 720? which is $\frac{7}{73}$ minute.

In the second case the second-hand is $\frac{1}{2}$ of 11, or $5\frac{1}{2}$, units in advance of the hour-hand, and is therefore $6\frac{1}{2}$ units in advance of the twelve-mark. Hence the 720 units it has passed over minus $6\frac{1}{2}$ units must equal the number of these units in the circumference of the dial. The question now is, If it take 1 minute to pass over $720-6\frac{1}{2}=713\frac{1}{2}$ units, how long will it take to pass over 720 units? which is $1\frac{1}{14}\frac{3}{27}$ m.

In the third case the second-hand is 11 units in advance of the minute-hand and 23 units in advance of the twelve-mark. Hence the 720 units it has passed over minus 23 units must equal the number of these units in the circumference of the dial. The question now is, If it take 1 minute to pass over 720—23, or 697 units, how long will it take to pass over 720 units? which is $1\frac{23}{697}$ minute. J. W. O.

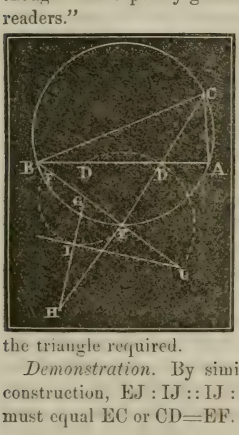
III. Let $2x$=diameter or x= radius of the island. Since the report of the gun can be heard n miles on land, in one mile it will lose $\frac{1}{n}$ part of its motive force, in x miles $\frac{x}{n}$ parts, leaving $\frac{n-x}{n}$ parts to be expended upon the water. As the report can be heard m miles on water, $\frac{n-x}{n}m$ will express the distance the sound will pass over after reaching

the shore, and $x+\frac{n-x}{n}m$ will represent the radius of the circle filled by the sound. Then, from the conditions, we shall have $x^2 . (x+\frac{n-x}{n}m)^2 :: a : b$; whence $2x$, or the diameter, $= \frac{2mn\sqrt{a}}{n\sqrt{b}+(m-n)\sqrt{a}}$ M'G.

[NOTE.—This value applies when $a<b$; if $a>b$ the value would be $2n\sqrt{\frac{a}{b}}$, and when $a=b$ the diameter$=2n$.—ED.]

XXIX (*November*). "To determine a triangle, having given the base, the line bisecting the vertical angle, and the diameter of the circumscribing circle."

We are glad to be able to publish the following demonstration of this problem in addition to the algebraic solution given last month. Prof. Henkle, in his last letter to the editor, accompanying it, says: "Robinson in his *Geometry*, and also in his *Mathematical Operations*, gives a neat algebraic solution of this problem, but in the latter work makes the strange remark that the list of problems in which this is included do not admit of a geometrical solution. This is not a fact, as the one given below will show. They are all capable of geometric solution. This problem being one of the most troublesome, I have thought that a purely geometrical solution might be acceptable to your readers."



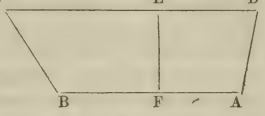
Construction. In the given circumscribed circle draw a chord AB equal to the given base. Draw BE to the middle of the arc AEB. On EF, equal to the given bisecting line, describe a semicircle, and from E draw EH (=BE) perpendicular to GE. Draw GH, cutting the semicircle in I. From I draw the tangent IJ, meeting FE produced in J. With EJ as radius, describe an arc cutting AB in D. Draw EDC, and join A and C and B and C. ABC is the triangle required.

Demonstration. By similar triangles, ED : BE :: BE : EC. By construction, EJ : IJ :: IJ : JF. Since EJ=ED, and IJ=BE, JF must equal EC or CD=EF. Q. E. D. W. D. HENKLE.

PROBLEMS.—VIII. Draw an arc 24 inches in length, to a chord 18 inches in length. Required, the versed sine, and the radius of the circle. J. D. P.

IX. Three men equally support a beam, of uniform size and weight, 24 feet in length; one lifting at the end of the beam, and the other two lifting with the beam bisecting an imponderable bar. Required, the distance of the two men lifting with the bar from the end of the beam. J. D. P.

X. In the figure ABCD, AB being parallel to CD, the side AB, the angles DAB and ABC, and the area ABCD are given. Required, the perpendicular distance EF. M'G.



XI. Suppose it is 1 o'clock. When the long hand of the clock has passed over five spaces the short hand has *gained* $\frac{1}{11}$ of five spaces, and thus as the long hand successively moves up to the point previously occupied by the short hand, the short hand has *gained* $\frac{1}{12}$ of the *last* distance. As no conjunction of the hands can take place until 5 is reduced to zero from repeated divisions by 12, how long before the long hand will overtake the short one? J. D. P.

COMMENTS ON THE SCHOOL LAW.

DEPARTMENT OF PUBLIC INSTRUCTION,
Springfield, Ill., March, 1862.

REMARKS ON THE 54TH SECTION.

IT is proposed briefly to examine the 54th section of the School-Law, which is in these words: "School-directors shall certify no schedule that reaches back to a time more than six months from the time fixed by law for the regular return and presentation of schedules to the school-directors. Schedules made and certified as aforesaid shall, at least two days before the first Monday in April and October, be delivered by the directors to the township treasurer."

In seeking the true intent and meaning of any legal provision, the first inquiry should be as to the purpose of the legislature — the object and end sought to be obtained. A true apprehension of this point is the first step toward a sound and fair interpretation, and a sure guide to correct conclusions. In the section before us this key to a just exposition is easily found. The object of the legislature is simply to secure promptitude in the returning of schedules; to guard against carelessness and neglect; to prevent the accumulation of out-lying schedules; to enable the township trustees and treasurer

to know the exact condition and claims of each district at each semi-annual meeting, and to keep their accounts with each district in a punctual and orderly manner.

To accomplish these purposes there must be some definite time within which schedules must be returned to the township treasurer, or be forfeited. Without such limitation it is plain that the financial affairs of the districts would always be involved in doubt. The trustees could never know beforehand how many schedules would be returned at a given time; and the directors of the several districts would be ignorant of the demands which might be made upon their funds. Schedules might lie for months, or even years, in the hands of directors or teachers, and then suddenly be filed with the treasurer and payment demanded, to the utter derangement of the plans and disappointment of the expectations of the several districts. The necessity of limitation is, therefore, self-evident. It is equally clear that the consequences of disregarding the established limits must be sufficiently serious to compel the necessary promptitude in the return of schedules. There must be a penalty, or the law will be practically powerless. That penalty is and should be the rejection of the schedule.

We come now to the question: *Is there* in the School-Law an express limitation of the time when, or within which, schedules must be certified by the directors and returned to the township treasurer? and if so, what is that limitation, where is it found, and how is it to be interpreted and applied?

There *is* such a limitation in the Act. Section 54 declares, in terms brief, clear, and peremptory, that "schedules made and certified as aforesaid shall, at least two days before the first Monday in April and October, be delivered by the directors to the township treasurer." That is, as early as the Saturday preceding each semi-annual day of meeting. That the periods above named are those fixed by law for the return of schedules is also confirmed by sections 23, 34, 42, 63, *et al.*

But how is the language of the 54th section to be interpreted and understood? "School-directors shall certify no schedule that reaches back to a time more than six months from the time fixed by law for the regular return and presentation of schedules to the school-directors." What does this mean? Are we to understand that directors may certify any schedule at any time, provided that said schedule does not reach back more than six months from the date of certifying said schedule? For instance: If a school is taught during the months of June, July and August, can the directors certify the schedule of that school in, say, the following November, and file it with the treasurer for payment the next April? They can not. The schedule, in the

case supposed, must be certified and returned some time between the close of the school and the first Monday of October following, or it can not lawfully be certified and returned at all.

The impression that the six months referred to in this section date from *the day of certifying the schedule* is quite common, but entirely erroneous. It arises from the singular ambiguity and inconsistency of the language used. Schedules can not be certified if they 'reach back more than six months from the time fixed by law for the regular return of schedules to the school-directors'. But there *is* no definite time 'fixed by law' for the return of schedules to the *directors.* All that the law says on that point is that the schedule shall be delivered to the directors *when completed.* The exact words are: "When the teacher shall have completed his or her schedule . . . he or she shall deliver it to some one of the directors, etc." (Section 53.) That is, as soon as practicable after the close of the school. And since schools *may* close on *any day* of *any month* in the year; and since, in like manner, schedules may be completed on any day of any month in the year; and since, in point of fact, schools *do* close and schedules *are* completed in different months and at different times in the month, it follows, of necessity, that schedules may be returned *by teachers* to the *directors* at *any time:* there is no time 'fixed by law' for such returns.

What, then, is the meaning of the language used in the section under notice? It means the time fixed by law for the regular return and presentation of schedules *by* the directors *to* the *township treasurer.* It can have no other meaning. There *is* a time 'fixed by law' for the return of schedules by the directors *to the township treasurer,* viz., 'two days before the first Monday in April and October', as prescribed in the last clause of the section; there *is not* a 'time fixed by law' for the return of schedules by teachers *to directors:* our interpretation of this point is, therefore, demonstrated to be the only true or possible one. From what has been shown we are now prepared to state with confidence that the true intent and meaning of the 54th section of the Act, and so much of the 53d as relates to the return of schedules, is embraced in the following propositions:

1. Teachers must deliver their schedules to the directors as soon as completed.

2. Directors must file the schedules with the township treasurer two days before the first Monday in April and October.

3. The schedules of all schools taught during the six months beginning with the first of April in any year must be certified by the directors and delivered to the treasurer in time for the trustees to act

upon them at their meeting the first Monday of October following, or said schedules may be rejected. And the schedules of all schools taught during the six months beginning with the first of October in any year must be certified by the directors and delivered to the treasurer in time for the trustees to act upon them at their meeting on the first Monday of April following, or said schedules may be rejected.

The last proposition seems too plain to be misunderstood; but I will add a word or two. The schedule of a school taught in either April May, June, July, August, or September, is returnable the ensuing October; and the schedule of a school taught in either October, November, December, January, February, or March, is returnable the ensuing April: no matter whether said school was taught for one month or six months. If, for instance, any school begins April 1, and ends July 1, the schedule must be returned the next October; or, if any school begins September 1, and ends December 1, the schedule *for September* must be completed separately and returned *in October*, and the schedule for October and November must be returned the *next April*. In a word, the State settles with teachers, so far as their schedules are concerned, twice a year — viz., April 1st, October 1st,— and no schedule-accounts are allowed to run longer; the books are balanced half-yearly, and a new schedule-account is opened with each teacher and district.

When a schedule is delivered to the directors for their examination and certificate, in order to know whether they may lawfully certify it or not, they have only to consider when said schedule is legally returnable to the township treasurer, and must govern themselves accordingly. If, for example, the schedule of a school which began in May is delivered to them in August, the case is plain; the time 'fixed by law' for the return of *that* schedule is the *next October*. But if the schedule is returned to them in May, and the school, of three months, began in March, then 'the time fixed by law' for the return of the part of the schedule *for March* was April 1; while 'the time fixed by law' for the return of the part of the schedule for *April and May* is October 1. In this case, so much of the schedule as applies to March is outlawed by limitation; it should have been delivered to the directors, certified and filed by them with the treasurer, the first of April preceding.

There is a distinct and continuous line of responsibility prescribed by law in respect to schedules, from the time they are completed till they are acted upon by the trustees. It is the duty of the *teacher*, as soon as his schedule is completed, to 'deliver it to some one of the directors'. If he neglects this duty till his schedule is forfeited by

limitation, he has no redress. It is the duty of the *directors* 'to carefully examine' the schedule, 'correct all errors', certify to its correctness, sign the certificate by at least two of their number, and file it with the township treasurer. If the directors fail to make the necessary corrections, or to properly certify and sign it, or to return it in good season to the treasurer, so that the schedule is forfeited or rejected through their neglect, they are personally liable for the loss sustained through such failure or neglect. I know it is customary for the *teacher* to return the schedule to the treasurer; but the *duty and responsibility* are devolved by law upon the *directors*. (See Section 53.) It is the duty of the *treasurer* to promptly file the schedule and report it to the trustees for their action; and if, through his neglect, a schedule should be lost, or should not be reported in time to share in the apportionment of the public funds, the treasurer is personally liable. It is the duty of the *trustees* to allow every schedule, duly filed and reported by the treasurer, its just and equitable share in the apportionment of the public funds, 'in proportion to the attendance certified'; and for any loss accruing through their neglect or failure, the law holds them also personally liable.

If a schedule is filed with the township treasurer in time to be included in the apportionment of the trustees, it can not lawfully be rejected, even though not filed on the day fixed by law.

I shall offer no apology for the length of these remarks, nor for the numerous repetitions that will be observed by the critical. I am not writing for literary critics, but with the one single aim and hope of being understood, and have labored only to find terms meet for that purpose.

THE ILLINOIS TEACHER.

The *Illinois Teacher* was established to promote the cause of free schools. This is its mission, its end, and its aim. It is purely an Educational Journal. It is devoted to no class or party in Church or State, except to the great Free-School Party. It is not a financial scheme to enrich any man or set of men. It is published at the lowest cash price, and its editors give their time and labor without pay. Similar journals in other States have been aided from the public treasury, but the *Illinois Teacher* has never had such aid. It is supported exclusively by the voluntary efforts of the friends of free schools. It is the friend and ally of that cause which is so dear to us all and so essential to the future well-being and glory of our State.

It is the teacher's professional journal, treating of the fundamental principles of education and the best methods of teaching. No teacher

can read it without being better fitted for his work — stronger in mind and heart. It is the counselor of school commissioners, abounding in hints and suggestions on visiting schools, examining teachers, conducting institutes, etc. It is the friend and helper of township trustees and treasurers, enlightening and instructing them in their duties. It is invaluable to school directors, imparting needful information in respect to the choice of teachers and to the government and discipline of schools. The official decisions and explanations of the school law, by the department of public instruction, are first published in the *Teacher*. Every number will contain something from that department, and all questions of general interest submitted to me will, if desired, be answered through the *Teacher*. In this way many may be benefited in stead of one, and the oppressive burden of official correspondence will be lightened.

School officers, fellow teachers, friends of education, one and all: I commend to you the *Illinois Teacher*. You can not afford to do without it. I ask you to subscribe for it and read it. The cost is trifling. It will do you good: it will help the cause: it will improve our schools and thus benefit our children. It is the only periodical of the kind in the State. Do not let it languish — do not let it die. I am earnest because I know its value. I thus urge you to take it and read it and study it, because it has no object, no motive, no purpose, but to advance the educational interests of the State. I urge you to take it just as I would urge you to study the school law, and become familiar with your official duties.

I appeal especially to school directors. Yours, gentlemen, is the most responsible office in our school system; the character of our district schools depends upon the manner in which you understand and the fidelity with which you perform your duties. The *Teacher* will help you. Send for it at once. Appropriate for the purpose if necessary a dollar from your district funds. You have a right to do this: the library clause of section 43 authorizes you to do it. Let a copy go into every school district in the State. And when the volume is complete, have it bound and placed in your district library, or kept for the use of your board. No book would be more appropriate or valuable.

It is ably edited by eminent, experienced, practical teachers, who so love the cause of free schools that they are willing to labor for that cause without money and without price. Will you not help them?

Friends of common schools in Illinois, are we not admonished by the fearful struggle through which we are passing, as if by the voice of God, that it will not do to neglect the education of our children. Let

us teach them to honor God, to love their country, to revere her glorious history, to cherish her benign institutions, to be intelligent, obedient, brave, loyal and patriotic citizens. So shall Illinois be ever firm and true — ever ready to stand by and defend the glory-trophied ensign of the Republic. To promote these sacred ends, through the unviersal diffusion of knowledge and virtue, is the earnest and steadfast aim of the *Illinois Teacher.*

STATE CERTIFICATES.

It is proposed to hold the next (third) examination for State Teachers' Certificates at some suitable time and place during the ensuing summer.

I make the announcement now, to elicit an expression of opinion from the teachers of the State in respect to the best time and place. It is not material to me. My only wish in the matter is to accommodate the greatest number. It will be taken as a personal favor if all teachers interested in this important movement, whether prospective candidates for diplomas or not, will give me their views on these points, in order that I may make the most judicious selection both of time and place. I should be pleased to see the subject discussed in the pages of the *Teacher*, and also to receive expressions of opinion by letter or otherwise.

Any teacher who proposes to be an applicant will, if desired, receive a circular explaining the method and requirements of the examination. I commend this subject to the teachers of the State, and ask for it their active interest and coöperation.

NEWTON BATEMAN, Sup't Public Instruction.

Arguments for the Payment of School-Taxes.— Some persons, who are willing to pay taxes in proportion to their property for general state purposes, object to any species of taxation for educational purposes. This objection is founded on a radically wrong notion of the relation of the children, and the education thereof, to the state. The state, within constitutional limits, has sovereign power over the property within its jurisdiction. The children within the state are, in a certain sense, the children of the state. The state taxes her property for the education of her children, not for the personal interest of the children, nor for the interest of their parents, *but for her own interest as a state.*

Hon. W. C. Larrabee.

EDITOR'S TABLE.

EDITOR'S CHAIR.

The Normal University, we are glad to learn, is fast recovering from the shock which it received last summer, when its Principal, with three of the associate teachers and some thirty of the male students, left the shades of Normaldom for the camp and the battle-field. About sixty new students entered at the beginning of the Fall Term. The number now in attendance is about one-fourth less than it was when the war broke out last spring; and at that time the school was much larger than at any other period in its history. The number is likely to be largely increased at the beginning of the next term, as there is a disposition in many counties now represented to avail themselves of the increased facilities granted by the Legislature at its last regular session, allowing two representatives to each county in stead one, as heretofore. But, strangely enough, about half the counties in the State have never sent a single student! It argues well for the school that in those counties which have been the most fully and constantly represented there is decidedly the strongest feeling in favor of sending as many as can be received.

A very marked improvement is observable in the health of the school. Since it left its dingy quarters in town for the commodious rooms of the University building, probably there has not been more than one-third the disability from sickness that there was in the same length of time during any part of the three years that the school remained in town. There is at present but one student absent from this cause, and he but for a few days. Blessed with health and contentment, the pupils seem to be pursuing their course both pleasantly and profitably.

The Examination at the close of the present year will be conducted by a committee chosen from the prominent teachers of the State; it will occur on the week preceding the Fourth of July.

The Board of Education, at its last meeting, in December, made an important change in the Model Department of the University. The design of this department is to furnish, as its name implies, a *Model School*, comprising all grades from Primary to High, in which the students of the Normal Department may be both observers and assistants; and where visitors may witness the practical application of those theories which it is the legitimate business of a normal school to teach. Students of any grade are received into this school from any part of the State, and pay a regular fee for their tuition. Heretofore these fees have been the sole compensation of the teachers in that department. Some of the evils necessarily connected with such a plan will be sufficiently apparent, and the first step

toward their remedy was taken by the Board in the unanimous adoption of the following resolution:

Resolved, That the Committee on Officers be, and they hereby are, instructed to reörganize the Model School, so that it shall be entirely under the control of the Board and of the Principal of the University; and that one or more first-class teachers be employed by said committee to take charge of the same.

In accordance with this vote, the Committee engaged Mr. C. F. Childs, for the past four years an eminently successful teacher in the Public Schools of St. Louis; and Miss Livonia E. Ketchum, Principal teacher in one of the primary schools of Chicago. These teachers have now been in their new positions for five weeks: the number of scholars in attendance exceeds that of the previous term; and every indication seems to point to the speedy realization of the highest expectations of the Board. *.

Teachers' Institutes.— The teacher, like the lawyer, the physician, and the minister, must have a special training to prepare him for success in his profession. It is true that occasionally in each of these professions we discover a genius, who, by the possession of extraordinary talents and by energy, arrives at success and eminence in his calling without having received the usual preparatory training; who seems to acquire the knowledge and skillful practice of his profession as if by intuition: but such cases are rare. "There is no excellence without great labor", whether in law, in medicine, in theology, or in teaching. That there is a special training needed for the successful pursuit of any of the three learned professions — law, medicine, or theology — is almost universally conceded; but a most erroneous and pernicious notion exists, that if any thing else is necessary to success in teaching beyond an acquaintance with the subjects to be taught, it is to be acquired only in the practice itself in the school-room.

It is true, a man can not be made an experienced teacher until he has acquired his experience by practice; nor can a lawyer, a minister, or a physician. The law-student not only masters the principles of law as contained in his text-books, but he also attends the courts to observe the practice. The medical student not only reads, but rides with his instructor, that his '*theory* and *practice*' may go hand in hand; that he may acquire not only medical *knowledge*, but medical *skill* also. So, also, the student of divinity. To one who has thought properly on the subject it would be quite as reasonable for a young man, on leaving his alma mater, to consider his academical diploma a sufficient license for his at once entering the practice of law, medicine, or theology, as of teaching.

But, it may very properly be asked, how can this be helped? Our schools, academies and colleges have no normal departments for the special training of teachers, and our State normal schools can not, in the nature of things, train a sufficient number of persons to supply even a very small part of the schools with professionally-trained teachers: how, then, can the tyro in teaching do otherwise than depend entirely upon his practice in the school-room for his experience?

Empiricism in the medical profession is esteemed, both by physicians and others, as the highest term of reproach and contempt that can attach to a practitioner: and justly so; for what man of conscience and responsibility would for a moment tamper with the life or health of a being, when he was conscious of his inability, from want of study and knowledge, to understand the case; and how much

less would any one dare to assume the responsibility of the teacher's place, when ignorance of his duty will entail upon his pupils consequences more to be deplored than any mere physical evils which empiricism might cause!

No teacher who has a proper conception of his responsibility and duty will leave unemployed any means within his reach for advancement in his profession. As compared with other professions, these means are limited, and are included in works on education, visitation of schools, and teachers' institutes.

We propose at present to refer only to the last. We hope, and believe, the time will come, although we shall not live to see it, when all our teachers will be professionally trained, when empiricism in teaching will meet even a heartier condemnation by the public than empiricism in medicine; but till then it becomes us to use every means to render the teacher, as he is now found in the school, as well qualified as possible for his duties. The institute is one efficient means for the accomplishment of this end — we should, rather, say *may be*, as it by no means always *is;* when properly conducted it is, as was designed in its origin, a normal school, where those who have not enjoyed the advantages of such a school can, once or twice a year, spend a short time, under competent instructors, acquiring *professional training*. This is the only true idea of a teachers' institute, in our opinion; and on some points we will venture a few suggestions.

The time for the spring institutes will soon be at hand. In organizing your institute,— first, have the session continue as long as possible. Second, place it under the charge of some *competent* instructor, selected from abroad, to whom you will confide its entire management and control: we say from abroad, because then there will be much less danger of the success of the institute being endangered by local jealousy: "a prophet is not without honor, save in his own country." An instructor to be *competent* must be a practical teacher; and such only should be called to conduct an institute. He should be one who is known to have achieved success in the school-room; who is interested in his calling, and is well informed in all the improvements of his profession. It is not a sufficient qualification for such a post that the Rev. A., 'Squire B., or Dr. C., when studying his profession, ten years ago, taught a winter school two years: those were the days of slat benches, and times and things are changed since then. Third, request the instructor to organize the institute as a school, in such a manner as to best set forth *his methods of instruction and school arrangement*. This is the *fundamental idea* of a teachers' institute. Therefore, fourth, do not spend the time in useless discussions of questions, or definitions; do not make the institute a debating-society, as is some times done, where the one who knows least talks most, and no body is profited. Whatever discussions there may be, let them be on *methods of instruction, school arrangement*, or *discipline*, not on books; and, moreover, set apart a certain time for such an exercise. Fifth, be present at the appointed time of opening the first session, and during the institute *never be late*. Sixth, never hesitate or refuse to take part in any exercise because the method of instruction does not meet your approval. Stay at home, or come to coöperate heartily and cheerfully in whatever arrangements may be adopted by the person or persons who conduct it.

We may have more to say on this subject in a future number of the *Teacher*. A.

THE OSWEGO TRAINING-SCHOOL.—Last month we spoke of the meeting at Oswego on the 11th ult., to examine into the system of Primary Instruction by Object-Lessons introduced into the schools there from the London Training Institution. We then hoped to be able to present our readers some report of this meeting, but are disappointed.

Since we last wrote we have learned that the course of instruction has been so satisfactory in its results that the Board have decided to organize another class, and have prevailed upon Miss Jones to remain, probably a year, longer. The year will consist of forty-two weeks, and will commence April 16. Pupils from abroad will be received by paying $24 tuition for the entire course, and will be able to procure board there as low as $2.50 per week.

When we remember that Miss Jones has for the last fifteen years had charge of the training of teachers in the Home and Colonial School, London, an institution commenced more than twenty-five years ago by Dr. Mayo and John S. Reynolds, both friends and disciples of Pestalozzi; and that it has grown to be one of the largest and best training-schools in the world, doing much to revolutionize the system of education in Great Britain; we can readily see the advantages likely — nay, certain — to accrue from spending a year at Oswego, and that this is doubtless the best opportunity that will ever be offered in this country to become acquainted with this beautiful system of education.

We give below an extract from a recent letter of E. A. Sheldon, Secretary of the Board (from whom those desiring further information can obtain a circular by inclosing a stamp), to one of the editors of this journal. We wish some of our doubting brethren might by it be induced to give some attention to object-teaching. We may not all be as sanguine of success as is Mr. Sheldon, nor as sure that all teaching should be objective; but almost any of us might do a great deal more of object-teaching without being in danger of passing the golden mean.

But we started out merely intending to pen an introduction to this extract:

"Please accept my thanks for your kindness in noticing our educational meeting. I am sure you can do nothing for the cause of educational progress more effective than to aid in throwing light and interest around this subject. It is destined to effect a complete revolution in our schools — in number of school-hours, government, methods of teaching, and the profession of teaching itself; or, rather, it will *make teaching a profession*, a title it has not yet earned. In order to teach this system with any success at all, teachers must be prepared for their work. It is just as reasonable to expect a man to become a good minister, or doctor, or lawyer, without any thought, study or preparation for his profession; or that a man should erect a beautiful edifice, imposing in its appearance and symmetrical in its proportions, without any knowledge of the principles of architecture or of the tools or materials with which to build; or that any other artisan should enter upon his calling with no preparation for his work; as that a teacher should undertake to develop mind who knows nothing of psychology, perhaps not even the meaning of the term itself; or, to take it in a broader sense, and more in accordance with the real character of the work to be done, to *educate children*, who knows little or nothing of child-nature.

"This system is based upon the laws of childhood, including the physical, moral and intellectual nature, the relation of these to each other, and of all to the physical universe. It works upon the principle that there is a certain natural order in which the faculties are developed, as also a corresponding natural order of appliances to draw them out and give them power; that there are certain characteristics of children — as activity, love of knowledge, and sympathy — which must be

observed, if we would develop harmoniously and symmetrically his three-fold nature. Now what is more evident than that a person ignorant of these principles, in regard to both their theory and practice, must fail, and worse than fail, in an effort to teach a system that has its very existence in these principles?

"The first thing to be done is to prepare teachers for the work. For this purpose we must have our *professional schools* — schools devoted exclusively to the study of education as a science, and its practice as an art. The time has already come, in our own primary schools, when an untrained teacher would no more think of teaching than our Board would of employing such a one. It is not possible for them to do it. On the introduction of this system we found it a necessity at once to open a training-school for the purpose of preparing teachers for this work. It was opened the first of May last, under the supervision of Miss M. E. M. Jones, a lady who has for the last fifteen years had charge of the training of teachers in the Home and Colonial Training Institution, London — a school probably unsurpassed by any of the kind in the world. This class will complete their course the first of April next, and another will be commenced the first of May. The members of this graduating class find themselves in the highest demand: if there were fifty of them they would all have good positions immediately and good pay.

"I believe, even in a pecuniary point of view, teachers would find it to their advantage, beyond a thorough education in the ordinary studies of the schools, to make a *special preparation for the work of teaching.* We have had in our class some of the best teachers in the country, graduates from normal schools and those who have had many years of successful experience, and they feel that they never spent any time so profitably as in this training-class. I hope you will do what you can in Illinois to impress this idea upon teachers, of the importance — yes, necessity — of *special preparation* for this work: without it Object-Teaching *must surely fail.*"

B.

New York on a Point of Order.— In the October (1861) *Teacher* we said, in noticing the proceedings of the New York State Teachers' Association, that "Either the Association needs to learn how to transact business properly, or the report of its proceedings needs emendation." This was said because in repeated instances no record was made of the way of disposing of matters under consideration. The *N. Y. Teacher* for February notices our criticism, and in result shows that it was just, while trying to show it to be unjust. It is said that subjects referred to gave place to the regular orders of the day. "We presume", says the *N. Y. Teacher*, "that no member can be compelled to make a motion to 'lay on the table', 'postpone', or otherwise, and the 'order' being called for, the pending question must give way. Where is your manual, Brother Willard?"

Our 'Manual' is always at hand in our desk, and is named '*Cushing's Manual*'. That instructs us (§ 134) that "it is a general rule that when a proposition is regularly before a deliberative assembly for its consideration, no other proposition or motion can regularly be made or arise so to take the place of the former and be first acted upon, unless it be either, *first*, a privileged question; *secondly*, a subsidiary question; or, *thirdly*, an incidental question or motion." A motion for the orders of the day he ranks (§ 136) as a privileged question. From § 143 we learn that when a special order is assigned, a *motion* for the orders of the day will supersede pending questions, unless they are of higher rank as privileged questions. From § 233 we learn that "when any proposition is made to a deliberative assembly it is called a motion".

From these points we find that pending subjects could be displaced by the orders of the day only upon a *motion* for the special order, and that any *call* for the order would be a *motion;* and as a motion it should be recorded in the proceed-

ings; and its prevalence, whether by general consent or on a division, should be recorded as an act of the assembly. The record which we criticised did not show that any action of the assembly superseded the pending subjects, and only in one instance among the several which called forth our remark was there any indication of any rule or order limiting the continuation of the subject.

While it is *well* for every member of an assembly of teachers to know parliamentary law, it is *essential* to but two of them, the President and the Secretary: to the one, that he may properly direct business; to the other, that he may record it. Will New York notice? S. W.

KILLED AT FORT DONELSON — JOS. G. HOWELL.— At Bloomington we have the news that in the late battle at Fort Donelson Lieut. Jos. G. Howell was killed. He was one of the first class that graduated at the Normal University, and was immediately afterward employed as teacher of the Model School in that institution. When the President's first call for volunteers was issued, he resigned his place and entered the ranks in Capt. Harvey's company, which was organized immediately after the fall of Sumter, and entered the 8th Regiment, Col. Oglesby's. At the end of the three-months' service he became first lieutenant in the same company, and was so doing duty when he fell.

He was the son of Rev. John S. Howell, of White county. When his father entered college at Jacksonville, in 1840, he was already a man with a family, one of the children being Joseph, who remembered me as a college acquaintance of his father, when I came as teacher to the Normal School. From this circumstance I felt a greater interest in the young man, whom I soon found to be remarkable for steadiness of character. He bore good rank as a student, and his efforts, though not marked by genius, showed that they came from a clear mind and an earnest heart. He was modest, and of quiet manners, so that we saw that his talents were yet unknown to himself. We hoped a career of growing eminence and usefulness for him; but now we mourn a promising manhood cut off in its early years. Honored be the patriot's memory! S. W.

BLOOMINGTON, ILL., February 19th.

WISCONSIN REPORT.— Our thanks are due Mr. Pickard, Sup't of Schools of Wisconsin, for a copy of the last Annual Report. A.

'THE COUNTRY PARSON', author of articles in the last volume of the *Atlantic* distinguished by that signature, is Rev. A. K. H. Boyd. F.

MODERN GREEK.— A second Romaic (modern Greek) newspaper has been recently established in London. F.

AFRICAN DISCOVERY.— Dr. Baikie was engaged in explorations upon the Niger two years ago, and was for most of the intervening time supposed lost. He has lately been heard from, safe and well, having been among tribes so remote from the lines of trade that he had not been heard from. F.

LINCOLN'S POETRY.— A poem entitled 'O, why should the spirit of mortal be sad?' has been published in this country extensively and attributed to President Lincoln. It was really written by a Scottish poet, Wm. Knox, who died while Lincoln was a boy. So says the *Border Advertiser*, a Scotch paper. F.

The Rhode-Island Institute of Instruction held its annual meeting at Providence Jan. 31 and Feb. 1. From the report which we find in the *Providence Press*, we know it must have been an interesting and profitable meeting. We notice among the business transactions a movement toward erecting a monument in memory of the lamented Dana P. Colburn, and hope it will meet with success. The management of the *Schoolmaster* came up for discussion, and it was decided to continue it under its present general auspices, under the editorial control of Messrs. Mowry, DeMunn, Manchester, and Snow — all practical teachers. B.

Camels in California.— Bactrian camels have been shipped from the Amoor country to California. They are of a breed acclimated to the Amoor valley, which resembles in many respects the silver-mining region on the Nevada range. P.

Our Advertising Sheet.— The readers of the *Teacher* will please notice that Messrs. S. C. Griggs & Co. make an entire change in their advertising pages this month. They will also find new advertisements from Messrs. A. S. Barnes & Burr, J. B. Lippincott & Co., Horace Waters, and Hiram Orcutt. To all these, as well as the advertisements of Messrs. W. B. Smith & Co., Geo. Sherwood, and Wheeler & Wilson, which have not been changed, we would invite their attention.

Situation Wanted.— A gentleman who has had considerable experience in teaching, and who holds a State Diploma, is at present unengaged, and desires a situation. Address the Editor of the *Teacher*. A.

Teachers' Institutes.— We wish to receive notice of all these gatherings in the State. We can to some extent aid in securing lecturers and conductors for them, where desired. We are especially anxious that the *Teacher* shall be a medium through which teachers throughout the State may know what their fellow laborers are doing. A.

LOCAL INTELLIGENCE.

Warsaw.— We have received from the Superintendent of Public Schools of the City of Warsaw, Mr. Case, the last Annual Report made to the Board of Education. The topics discussed in this report are such as are usually treated of in such papers, and are those in regard to which the public needs most to be informed: they are the importance of general education, the graded system, primary instruction, object-lessons, coöperation of parents, attendance, promotions, high school, qualifications of teachers, teachers' meetings, and the annual financial report.

Had we room, we would like to make several selections from this report to present to our readers, but our space will permit us to make but two or three. In discussing the subject of coöperation of parents, the report says:

Coöperation of Parents.— To attain the highest success in our schools, it is necessary that the teacher should have the coöperation of the parent. The parent and teacher should act in concert, and understand each other fully in the important work

in which they are engaged. It is useless for the teacher to insist upon obedience, respect and politeness from his pupils while they are taught the opposite at home. The troubles that constantly arise in the school-room in some communities are traced to the *home* of the pupil as a river is to its source. The evil can not be cured through remedies applied in the school-room, any more than a fountain can be purified by cleansing its streams. If the parent desires to enfeeble the authority of the teacher and render the most earnest and judicious efforts fruitless; to break up all habits of order, studiousness and obedience, and to shut out all prospect of the future honor, usefulness and happiness of his darling child; he can easily do so by sympathizing with and sustaining him in his complaints of the teacher, by condemning the teacher on the *ex-parte* testimony of the child, and by seeking redress with awful threats of 'whipping the teacher', mingled with curses and execrations against the Board of Education. Such parents are educating their children with fearful rapidity to become outlaws to society and a disgrace to themselves. They are sowing the wind, and will certainly reap the whirlwind: "the disloyalty which they have taught their children will fall upon their own heads!" It is an old saying that 'children who are governed at home are easily managed at school'; and observation teaches that those parents who are the most exercised if corporal punishment is administered to their child are frequently the most cruel and severe themselves. They complain of the use of the switch, while they use the wagon-whip, the ox-goad, or the boot.

A better way for the parent would be, when he feels aggrieved from the seeming harsh treatment of his child by the teacher, to go directly to the teacher alone and hear his statement of the case, and learn, if possible, all the circumstances connected with it, and the motives that actuated the teacher. If an error was really committed, an error of judgment, point it out to him and kindly forgive it, remembering that a teacher is a human being, and 'to err is human'. How many parents are there with only three or four children who do not commit errors daily in managing so few? How difficult the task to manage fifty or sixty, with so many complexities of character and disposition! Few parents as well as teachers have the ability to manage children without the use of the rod; and we doubt the practicability of substituting any candy or sugar-plum government for that which is sanctioned by Holy Writ, and has for its motto 'spare the rod and spoil the child'.

Corporal punishment should only be used as a *dernier resort;* and then administered *slowly, calmly, and never with excitement or passion in the teacher.* To secure this it is usually more expedient to delay the punishment for some time after the commission of the offense. It may be better in most cases to detain the refractory scholar till after school-hours. The scholar should be led to feel that the sole motive of the teacher is his good and the good of the school. Chastisement is given not that justice may be meted out, not to gratify revenge, but as a reformatory means for the disobedient. It need only be added that the duty of the parent to the child is to fully sustain the authority of the teacher, except in the most extraordinary and very unusual cases. The control and authority of the teacher in school-room and school-grounds is fully equal to the parent—'*in loco parentis*'. In case the parent feels that the punishment has been too severe, or without just cause, he should undoubtedly first confer with the teacher and hear his statement, and, if yet unsatisfied, refer the matter to the Board. Wherever candor is manifested in the parent, and no desire to exhibit themselves to be bullies, the Board will most willingly investigate all causes of complaint; and if there has been just cause, they will unhesitatingly use such means as will prevent a repetition of like circumstances.

The practical good sense of this commends itself so forcibly to us that we wish this report might have a circulation more extended than the single community for which it was intended; for, we think, there are few teachers who have not experienced the difficulties described by Mr. Case, arising from non-coöperation or active opposition of parents.

On the subject of the High School Mr. Case writes:

It is further believed that our High School is worth more to the schools of a lower grade than all it costs, independent of the advantages received by its actual pupils. The value of a powerful and abiding stimulus which it exerts over the lower grades can not be easily measured, or counted out in dollars. To abolish it would be to offer a premium to dullards for their stolidity; to deprive an industrious pupil of further advantage because he had been industrious and persevering.

The High School strengthens, energizes and renders complete our whole system, induces a greater degree of thoroughness and expansion to the whole course of instruction, a better attendance and more exemplary deportment in all the lower grades, and opens an avenue to the realms of higher knowledge through which the son of poverty and of wealth may walk hand in hand.

This is but a corroboration of the views of all our most eminent and experienced educators, that, where the number of scholars will warrant, the high school is necessary to give the system its full efficiency and completeness.

We observe with much satisfaction that the Superintendent, in his report, urges strenuously that the Public Schools be entirely supported by public funds, and thus made *free schools*, in stead of, as at present, being sustained largely by *tuition*. This is a move in the right direction, and we wish success to it.

On the subject of primary instruction the report says:

It requires rare and special qualifications, correct scholarship, a philosophical mind well stored and disciplined — *the first order of real educational talent*, — to make a model teacher in a primary school. The eye of the little one is upon her teacher, and she is transferring upon the untarnished canvas of the young soul, with all the faithfulness of a true limner, delicacy or coarseness, refinement or vulgarity, generosity or selfishness, love of truth or of falsehood, gentleness or turbulency, quietude or fretfulness, pride or humility; and *she paints with imperishable colors*. If any teachers should be persons of large experience, unexceptionable habits, and sterling traits of character, it should certainly be those who have charge of primary schools.

To this we give our most cordial assent, and long for 'the good time coming', when all school-boards will entertain such enlightened views.

We are surprised that such *exalted talents* and *distinguished virtues* should command but $18 per month in Warsaw. A.

Monroe County — a Good Example.— From *The Advocate*, published at Waterloo, Monroe county, we observe that a work is going on in that county that will certainly be productive of good results. The energetic Commissioner of Monroe county, Mr. James A. Kennedy, has entered upon his work of the visitation of schools. Judging wisely that his work would be of comparatively little benefit unless he should receive the coöperation of the public and secure their interest and sympathy with his efforts, he makes weekly report of his visitations through the columns of the *Waterloo Advocate*, setting forth at the same time his views and purposes. We commend this plan to our county commissioners generally. The public needs to be enlightened, if we expect it to support and encourage educational enterprise; and we know of no way in which this may be done so effectually as by the means adopted by Mr. Kennedy, using the county paper. Unless public sentiment is educated to keep pace with the advance in the school-room, and in other educational departments, much of the labor of teachers and commis-

sioners will be useless. By weekly reports of visitations much is done also to stimulate and encourage the teacher; he feels that his labors are not entirely unnoticed. Had we space we would like to publish one of the reports of Mr. Kennedy that has reached us. We hope all our commissioners will, like Mr. Kennedy, interest themselves in extending the circulation of the *Teacher*, and thereby render their labors doubly valuable. A.

Chicago.— In the Chicago Teachers' Institute the committee have adopted the plan of having at each Institute one or two ten-minute exercises illustrating knotty points in any part of the course of instruction. Also, of having a lecture bi-monthly, by one of the principals. Both plans work well.

We publish in this number Mr. White's address, which we commend to our readers' notice; and we have on hand and shall soon publish the last one, Mr. Averill's, 'Concerning Forethought and Afterthought.

The Haven, the new school-building in the South Division, situated on Wabash avenue, near Liberty street, which was commenced late in the fall, has received its slate roof, and is fully protected from the weather. This building, although not the largest, will be one of the finest school-buildings in the city. It has one new feature: the roof is carried up in such a way as to make, with comparatively little expense, a fourth story, one-half of which will be used as a hall for exhibitions, and the other will be fitted up as a gymnasium for the scholars. On the second floor the space over the lower front hall will be made a reception-room for the principal — a very desirable convenience not now possessed by any of our city schools. The building will, we suppose, be opened for the reception of pupils at the commencement of the fall term in September. B.

Kendall County Teachers' Institute.— The Teachers' Institute of Kendall county held its second annual session at Plano, commencing October 1, and continuing in session five days. E. W. Barnes, School Commissioner, presided, and directed the exercises. Plano is a thriving town on the C. B. & Q. Railroad. The attendance during the early part of the session was large, but, on account of the heavy rain and unfavorable weather, the number toward the close decreased. C. T. Chase, of Chicago, was the principal conductor of the exercises. Plans for intersting scholars were given and discussed. The exercises were characterized by interest and much good feeling. We hope that the improvement among the teachers and progress of public sentiment may be unimpeded. Mr. Barnes is a man of sufficient experience in the business to make an efficient and acceptable officer. P.

Whiteside County.— We have received from our friend Mr. Parker, of Sterling, a circular addressed to the teachers of Whiteside county, calling their attention to the subject of Geology, and soliciting their coöperation in a Geological Survey of that county. From a private letter received at the same time, Mr. Parker informs us that already arrangements have been made to carry on a scientific survey of the county in the departments of geology, botany, and conchology, during the coming season. We have long known that Whiteside county has active and energetic teachers, and we are glad to see this further evidence of their spirit and enterprise. We wish the fullest success to the effort. A.

KNOX COLLEGE — GALESBURG, ILLINOIS. — We are pleased to learn that this old and well-known institution is in a healthy and prosperous condition, and still pursuing its career of usefulness. A.

PERSONAL. — Miss L. E. Ketchum, of the Normal University, attended the recent examination at the Oswego Training-School. We hope to have an account of what she saw there. B.

MERCER COUNTY TEACHERS' ASSOCIATION will hold an institute, at Aledo, on the 12th, 13th and 14th of this month.

NOTES AND QUERIES.

QUERIES. — 1. How should we dispose of *to* in such expressions as *to-day, to-morrow, to-night*, etc.? F.F.

2. What is the derivation of the word *kerosene?* It is not found in any of the dictionaries. F.F.

3. 'Kingdom of the Two Sicilies'. How did this kingdom obtain its name? J.W.O.

4. "On a cold night some water was left standing in a metallic vessel. In the centre of this a small china cup was left, also containing water. The water in the outer vessel was frozen solid, while the water in the inner one was considerably above the freezing-point. Please explain this." Ladies' Repository.

5. The *Ladies' Repository* gives the following as examples of adjectives *governing* substantives; the adjectives being placed, generally, in the predicate, and governing the substantives following them, in the objective case, no preposition being supplied:

"To reign is *worth* ambition, though in hell."—*Milton, Par. Lost*, I, 262.

"Alexander the Great was the only hero whom this god (Caracalla) deemed *worthy* his admiration."—*Gibbon, Rom. Empire*, chap. vi.

"He ceased, and *next* him, Moloch, sceptred king,
Stood up, the strongest and the fiercest spirit
That fought in heaven." —*Milton, Par. Lost*, II, 43.

"O, it is excellent
To have a giant's strength; but it is tyrannous
To use it *like* a giant." —*Measure for Measure*, Act II, Scene 2.

"This deed of thine is no more *worthy* heaven
Than thou wast *worthy* her." —*Othello*, Act V, Scene 2.

"*Near* yonder copse, where once the garden smiled."—*Deserted Village.*

J.W.O.

6. The same authority asserts that it is *logically* correct to make adjectives of two or more syllables *regular* in comparison, and quotes, among others, the following examples:

"What she wills to do or say
Seems wisest, *virtuousest, discreetest*, best."
—*Milton, Par. Lost*, VIII, 549.

"The *honorablest* part of talk is to give the occasion."—*Bacon, Essay on Discourse.*
"Aggravating his sins with the *cruellest* bitterness."—*South's Sermons*, Vol. I, Ser. 3.
"The *dreadfullest* fight I ever saw."—*Pilgrim's Progress.*

"She is the *peevishest* hussy breathing."— *Steele. Spectator, No.* 390.
"Twelve thousand men of the *valiantest*."— *Judges*, xxi, 10.
"*Fearfulest*."— *Richard III*, Act 3, Scene 4.
"The *horriblest* traitor that ever lived."— *Raleigh.*
"The *ordinariest* case."— *Locke, On the Understanding.*

Will Mr. Westman favor us with his opinion on these questions? J.W.O.

NOTICES OF BOOKS, ETC.

THE CAROL: A new and complete Music-Book of Instruction and Practice for Schools, Academies, and Singing-Classes. By William B. Bradbury. pp. 224. Price 38 cents. New York: Ivison, Phinney & Co. Chicago: S. C. Griggs & Co.

Until *Mason's Normal Singer* was published, we had never seen a book which came up to our idea of what a singing-book should be. It did. We do n't know of above half-a-dozen poor songs in it. We have sung from the *Normal Singer* for the last five years, and think it is about worn out. For a year or more we have been looking for a book which we thought had all the excellences of the *Normal Singer* with as few defects. We think we have found it in the *Carol.* The words and music are, for the most part, new, having been written for the work, and have evidently been composed with constant reference to the educational, recreative or devotional end to be attained.

The selection of patriotic pieces is excellent, comprising several late compositions which are rapidly becoming popular, with several of the older national hymns. The collection of devotional pieces is unusually large; and the selection of tunes particularly happy. B.

ZOÖLOGICAL SCIENCE: Or, *Nature in Living Forms.* By A. M. Redfield. pp. 700. $1.50. New York: E. B. & E. C. Kellogg. 1858.

This is no new publication, as the date given above will show. We have been asked several times what is the best work to be used in giving as much instruction in Natural History as it is advisable to give in our common schools, and we speak of this work now, because it is the best of any within our knowledge for the purpose mentioned. Is does not give the characters and descriptions with the technicality and minuteness of the purely scientific treatise, in which the array of unexplained and technical language is often found repulsive and discouraging; neither are these ignored after the manner of some popular treatises. The characters of the Classes, Orders and Families are given with considerable fullness; the prominent ones of the genera and species are generally given, some times blended with other particulars relating to the general habits, or interspersed with illustrative anecdote. Always from the statements made the reader can form some correct and consistent ideas as to the genera and species noticed.

Geo. Sherwood, Chicago, will send the work, *post-paid*, on receipt of price.

B.

PRACTICAL CHRISTIANITY: A treatise specially designed for young men. By John S. C. Abbott. pp. 302. 60 cents. New York: Harper & Brothers. Chicago: sent post-paid by S. C. Griggs & Co., on receipt of price.

This work, dedicated to the young men of our country now battling for her de-

fense, is written with special reference to those who, thoughtless upon the subject, can hardly be induced to read standard works on Christianity.

It consists of a series of essays written in familiar style, interspersed with pointed anecdotes, and containing the testimony of most of the great men of our times. We have read it hastily, and have been so well pleased with it that we have laid it by for a second reading. B.

OBJECT-LESSONS: Prepared for Teachers of Primary Schools and Primary Classes. By A. S. Welch, Principal of the Michigan State Normal School. New York: A. S. Barnes & Burr. 1862. pp. 173. 50 cents. Sent, post-paid, by Geo. Sherwood, Chicago, on receipt of price.

Teachers will find this little book a valuable addition to their list of works on object-teaching. It is more elementary in its character than any heretofore published. The first sixty pages consist of exercises for the culture of the ear, embracing lessons on the features of the face, and of drawing-lessons preparatory to learning the alphabet. These, with the succeeding thirty pages, making rather more than one-half the book, are intended to be given the children when they first enter the school-room.

The lessons on mathematical plane figures and solids are excellent, and may with profit be given to *any* of the scholars of our common schools.

We are disappointed in the size of the book; but what is lacking in this direction is made up in the quality of the lessons.

Its exceeding low price places it within the reach of all, and we hope our readers generally will procure a copy. We are sure they will not regret it. B.

BORDER LINES OF KNOWLEDGE IN SOME PROVINCES OF MEDICAL SCIENCE. By Oliver Wendell Holmes, M.D. Boston: Ticknor & Fields. 1862. pp. 80. 75 cts. Sent, post-free, by S. C. Griggs & Co., Chicago, on receipt of price.

This volume is the introductory lecture delivered before the medical class of Harvard University, November 6, 1861. The author says he is only sending out a few pickets under the starry flag of science to the edge of that dark domain where the ensigns of the obstinate rebel Ignorance are flying undisputed. Rather has he made a reconnoissance in force, and his shots have all told on the enemy he has all along disturbed.

We have read the book with interest, guessing at the meaning of the technical terms we did not understand, and have received much instruction from it. B.

PILGRIMS OF FASHION. By Kinahan Cornwallis. New York: Harper & Brothers. 1862. pp. 337. $1.00. Sent, post-paid, by Griggs & Co., Chicago, who are special agents for all of Harper & Brothers' publications.

We see by the advertisements at the close of this book that Mr. Cornwallis has published seven or eight works, most of them novels, and that one of them has reached the fifth edition. We fear the author will never enjoy the felicity of seeing 'second edition' onthe title-page of 'Pilgrims of Fashion'.

We thought the Harpers never published a poor book. We confess we were mistaken; for among all the poor books it has been our fortune to read, we never saw one which was so unmistakably trash as this. We should think the author had taken all the refuse materials left over from his other works and com-

bined them in this. Having no plot, and filled with worn-out expressions and quotations, the author has been obliged to lay claim to five generations of a family, bearing at first the hackneyed name of Perceval — the first scene being laid during the revolution, the last in the month of November, 1861 — in his unsuccessful effort to make a readable book of the common size; and lest, in so many generations, his characters might get troublesome, he disposes of them one at a time by a violent death.

We might not be so much surprised were this the first attempt at novel-writing of some silly, sentimental girl of sixteen; but as the eighth *recent* work of a man who accompanied the Prince of Wales last year in his tour through the United States, we submit it is too bad.

In his closing paragraph, Mr. Cornwallis says he could have 'elaborated the theme volume upon volume'. We thank him for sparing us the infliction. B.

The Type of Music: A new system. By P. H. Dayhoff. Peoria: H. Couch, No. 6 South-Washington street.

We find a book bearing the above title on our table; but as, unfortunately, music is not one of our accomplishments, we are unable to give an opinion as to its claims for merit as a new system. The author claims to have invented a system by which the acquisition of a knowledge of music is much facilitated. We hope his claims are well based, and commend the book to the attention of musicians, and others interested. A.

Manual of Agriculture for the School, the Farm, and the Fireside. By George B. Emerson and Charles L. Flint. Boston: Swan, Brewer & Tileston. Published under the sanction of the State Board of Agriculture.

Here comes a new aspirant advancing its rights to a place in our already overburdened course of school-studies. The claims of agriculture have already been acknowledged by the people and the State; and now, we believe, for the first time, it asserts its claim to a place in the common-school course. That too much is attempted in our common schools, both in the town and rural districts, that the range of study is too extended, is well known to all acquainted with the subject. If the introduction of this branch of study is but to add one to the list of studies, to be pursued as hastily and superficially as the rest, we wish it no success. Still, we herald its appearance with pleasure; we believe its demands for a place among our school-studies are just, and should be allowed, even if it is necessary in so doing to reject some branches that have have long held a prominent place in the school-course.

We have examined the book with some care, and although in several respects — as regards style and arrangement — it is not what we would wish in a school text-book, yet can cordially recommend it to the examination of teachers, and hope that it is but the forerunner of better things. A.

Received.— We have received, too late for notice this month, a copy of *Allen's New Primary Geography*. We will give our opinion of the book in the next number of the *Teacher:* meantime our readers are referred the advertisement of the publishers, J. B. Lippincott & Co., of this and other text-books.

ROBINSON'S SERIES OF MATHEMATICS. New York: Ivison, Phinney & Co. Chicago: S. C. Griggs & Co.

This series, consisting of *twenty* volumes, is now, with the exception of the Differential and Integral Calculus (which is in preparation), complete, and is, without question, the most complete series of mathematical text-books ever issued in this country.

The preparation of a series of text-books so extensive as this would employ more than the life-time of one man. Mr. Robinson has therefore confined his labors to the higher portion of the series, and the more elementary portion has been prepared by Messrs. D. W. Fish, of Rochester, and J. H. French, of Syracuse, both gentlemen of long and successful experience as teachers.

The *Primary* and *Intellectual* Arithmetics are wholly the work of Mr. Fish. In the *first*, the operations of Adding and Subtracting, of Multiplying and Dividing, are first shown by pictorial objects; portions of the elementary tables are introduced at the commencement of each lesson, and applied to short examples concerning familiar objects; and the more simple and easy Denominate tables have been introduced.

The *second* is intended as an exhaustive treatise on Mental Arithmetic. The arrangement and classification are strictly systematic. We have been particularly pleased with the analyses. We have carefully examined these to see if an analysis taught in one portion of the work would agree with that taught in another, as we have some times been troubled with having two or three systems of analysis for the same class of examples in different portions of the same text-book. We find these, as the author claims, *full*, *concise*, and *uniform*. The treatment of Percentage and Interest is peculiar, and of such a character as to greatly shorten many of the operations in them.

The *third* book of the series, the *Rudiments of Written Arithmetic*, also prepared by Mr. Fish, is a little work of 192 pages, specially intended to furnish a small and simple class-book for beginners, which shall contain no more of theory than is necessary for the illustration and application of the elementary principles of written arithmetic. We found the book just what we wanted for giving our class miscellaneous problems after the set lesson of the day had ended, and used it thus until one of our assistants, who was looking for a book for the same purpose, spied it on our table; and since that time when we have wanted it we have had to send to her for it: in fact, we had to *borrow* it from her to look it over before writing this notice.

For use in the *unclassified* or *night* schools of our large cities, where the greater portion of the pupils are able to obtain only a limited knowledge of arithmetic, this book is unequaled.

The *fourth*, *fifth*, *sixth* and *seventh* books embrace the *Practical* and *Higher Arithmetics*, with the *Keys*, and were prepared by Messrs. Fish and French conjointly.

Neither of these books is incumbered with the multiplicity of notes and suggestions too common in Practical Arithmetics, which make the author perform most of the thinking and labor necessary to the study of Arithmetic. The analyses are full and accurate; the definitions clear and concise; the rules are characterized by brevity and perspicuity; and the arrangement of the examples has evidently been made with special reference to their practical utility and adaptation to the real business of active life. In the *Higher Arithmetic* considerable prominence has been given to Percentage and its numerous applications, especially to Stocks, Insurance, Averaging Accounts, Domestic and Foreign Exchange, and several other subjects embraced in the course of study prescribed in Mercantile and Commercial Colleges.

These works conclude the Arithmetical portion of the series. Next month we propose to speak of the remaining portion of it. B.

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TERMS OF ADVERTISING.

The annexed table shows the rates of advertising in the *Teacher*. Bills will be made out against yearly advertisers, and payment expected, twice a year—in the months of June and December. Advertisements inserted for parties who do not advertise with us regularly must be paid for on the expiration of the time for which they are ordered. Advertisers should in all cases state how many insertions are desired and how much space they wish to occupy; otherwise, their advertisements will be displayed according to the taste and judgment of the printers, continued till forbid, and bills be rendered accordingly. No advertisement will be counted less than ¼ page. All material alterations of standing advertisements will be charged for at the rate of $2 per page.

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ILLINOIS TEACHER.

VOLUME VIII. APRIL, 1862. NUMBER 4.

PLANT TREES AND GROW RICH.

"DID you ever see a rich school-teacher?" said mine host, at the twelfth boarding-round place that I visited. "You school-teachers", continued he, not giving time to reply, "must be a tarnation milk-and-water set. You travel the country round and round, stopping here a few months, and in the next town a few months; staying as long as you want to or are wanted, as the case may be." (Wonderfully true, thought I, for that was my fourth school in two years, two of which owed me one-half my salary.) "Why do n't you sit down some where, take up a piece of land, and go to work? Then you might stand some chance of being somebody. No man can amount to much who wanders around from place to place. He must fasten himself some where; *tie up* to something; make his mark in some solid, lasting form, or he will pass away and be forgotten, as the wild wolf or deer which go to the brook to drink. Their tracks won't last over one freshet, and that 's the end of their marks."

It was vain to talk to him about low wages and poorer pay. "You ain't sharp," said he, "or you 'd get bigger pay (that is, if you are worth more money), and then you 'd look out and *get it.*" It was vain to argue. The old curmudgeon was fixed. He knew what it was to begin with nothing and to fight it through for twenty years in a pretty hard way, and school-teachers, he thought, might all turn to and do as he had done. Well, perhaps they might. But what of that? We are not all wanted as farmers, nor horse-doctors; nor yet as ship-builders, nor clergymen. Society has worked around into such a form that a class of men and women are needed as teachers, as much as men are needed at the plow-tail or women at the wash-tub.

But there is more truth than beauty in the stern comments of

our old farmerly friend, raw and ungraceful as it seemed to his guest. Traveling teachers, traveling gipsies, traveling organ-grinders, traveling menageries, do n't seem to amount to much. They may even get good pay; but by some means, and no teacher can tell how, it slips away. So that all our perambulating brotherhood are and ever will be poor, just as Methodist ministers are most likely to be poor, be they never so worthy.

But there are riches for the teacher, and the minister, too, which money-catchers know nothing about. Cattle and sheep and hogs and horses and houses and lands and goods and merchandise are not the only wealth of this world. There are treasures laid up in the Father's bosom, which the duteous teacher has earned and the Son gathered against the bountiful day of recompense. Ah! little does the covetous hunks know of their beauty, their purity, their value; and it is a blessed thing that they only can know who see not as such men see the wealth of pure hearts glorified.

But these are not all the treasures the good teacher has or may have. The surroundings of every school-house in our land need improving. Look at the cheerless waste that little brown cottage is the centre of. Cheerless and dreary is the way to its stern and dingy walls. No body in particular in the neighborhood has any special charge or special interest. The trustees or directors are expected to have; but their time and the means at their disposal are devoted to other purposes of more pressing demand.

It is in just those things that the teacher ought to be interested. The school-house is the centre of his thoughts. There he is lord as well as master. If he has any taste, there is the place to display it; if he has any pride in the beautiful things of the world, there it will show itself. Where you see a teacher planning with his pupils to lay out the grounds into garden-beds, or flower-plots, or a grass lawn with walks and pleasant nooks, there you may expect to find an interested community of children, gratified parents, and contented teacher. Pay, alone, does not satisfy a teacher. His notions of wealth take to other channels and centre in brighter views nearer to heaven.

Even the ambulating pedagogue may leave his mark in every country neighborhood where he sojourns a winter or a summer. Yon graceful elm by farmer Thrifty's door was planted by his own hand; and the oaks and chestnuts and evergreens near by were later offerings by him in the broad temple of rural grace. There is wealth in trees, and monuments in their waving boughs, and voices in their trembling, wind-swept leaves, which flourish and endure long after the hands that planted them have grown powerless and chill. He that would live in the blest memory

of children and stay with them in mind, as friend, till age jostles strength away for infirmity, will plant trees around his school-house and invite sweet song-birds to nestle among their branches. There is wealth in the unmeasured strength of the forest-monarch, which his rugged limbs have gathered in from a thousand blasts; and this the teacher will make his own.

Children will love the tree a teacher planted, and turn to it instinctively, and call it after his name. They will point you to the very spot in the grove where they dug it, and show you how, and planted it carefully, and guarded it with stakes, and watched it every noon-time and recess lest rough Harry or burly Jim should uproot it in their uncouth ways of displaying their strength. When their parents come to visit the school they will show them the tree of their favorite teacher. Year by year, as the leafy boughs spread wider their shade, taking in more of the new-comers to the school, will its blessings enlarge and the praise of the good teacher of other days increase.

Oh, the wealth, the precious treasure, the uncounted blessing, of a pure child's cordial, grateful, happy remembrance! To live there with purity, to rest there in joy, to abide there unchanged as a thing of light, a long line of blessing, is riches — riches beyond gold or cattle or merchandise or ships or lands — riches and monuments for good teachers to enjoy. C.

HOW TO PLANT A TREE.

In the first place, take it up well. It is a thing of life. Though it can n't move, it can and will 'tell tales on you' if you abuse it. Pull off its little tender roots, and you cut off all its means of getting food. Save them carefully; keep them moist — damp, only, not wet — until ready to plant them out again, and you have avoided the first, probably the greatest, cause of failure in tree-planting. Let the day of removal be damp if you can so arrange; cloudy, at least, and not very windy. In digging, be sure that you commence on one side and work underneath, not cutting off big roots nor little ones; cover them with dampened straw while removing to the new grounds; have the hole ready where they are to be deposited — a good large one, by all means. Plant the tree about as deep as it stood before. If you have injured some of the roots by removal, cut off branches to balance. Do not hurl in the dirt by great shovelfuls and stamp it down hard, but

carefully sift it in, pressing the fine mould around the delicate fresh roots with the fingers and the hand.

Manure is not necessary on our usually rich prairie soil. Coarse manure is bad; it causes the earth to dry up. Perfectly rotten chip-dirt is good; it furnishes just the right kind of food for the rootlets. Stick stakes by the tree when the earth is replaced and tie it to them with ropes of hay, to keep it from being twisted about by the wind. If you save all the roots alive, not broken, nor dried, no watering will be necessary.

If the day be hot or windy, it will be best to dip the roots into a wash of loam or clay made by digging a hole, pouring in water, and mixing up earth enough to give it the consistence of cream. Dip the roots in this and let it dry on before removal. It will protect them from the air most effectually, and benefit rather than injure them after planted.

Plant the tree as soon as the frost is out of the ground and it is dry enough to work upon; that is, if you can attend to it: if not, you may plant any time till the first or middle of May.

What a long time Nature has set apart in which such work may be done! How many trees a week might a teacher dig and set about his school-grounds where groves or nurseries are near at hand! C.

COMPOSITION-WRITING.—Number II.

In our last article we spoke of the ominous cloud that darkened the youthful countenance whenever an exercise involving pen and paper was broached: our present paper shall be devoted to the presentation of one method by which such gloomy scenes may be avoided.

Before we enter on our argument, however, it may be well to make a few explanations: first, that we are not addressing the whole school, but merely one class; second, that the class all possess the requisite manual and mental abilities for the work,—that is, can write and think continuously for a time on one topic. Sentence-making, of course, may be practiced with children at almost any age, but for our present purpose we are contemplating such pupils as are ordinarily required to prepare original efforts.

It is Friday morning, and the small grammar-class have just come up to recite. "Scholars, I will not hear the lesson to-day, but in

stead will write a composition on the board: after I am through you can have the chance of correcting the mistakes." The proposition strikes them as exceedingly novel. The teacher write a composition! That august functionary descend from the serene hights of his intellectual omnipotence and perform the literary drudgery of scholarly humanity! I go to the board, however, and before their minds have well reconciled the apparent inconsistency of the proceeding, their astonished eyes read something like the following:

THE SHUMAKER is a useful traid if their were no shumakers people wood have to do without butes and shus when you go to get a but maid the shumaker takes a string and mezures your foot; Then the shumaker cuts them out in the lether and sos the peaces together and then hamers on the soul. shumakers use a low bensh to sit on & an all to make the wholes & a lether apern to put on to keep off the dirt, Thay so with wacksends. thay use cafskin shepskin lasting &c and other kinds of lether two numerous to mention, This is all I will say at presant

It will be at once observed that I assume, for the time being, the character of an utter ignoramus; transferring myself as far as possible into the supposed mental status of a primitive genius in Orthography, Punctuation, and Rhetoric. "Now, scholars, those who notice errors may raise their hands, and I will give you liberty of going one by one and correcting them." It is needless to say that impatient digits rise with electric rapidity. Nancy has the first chance. She observes that the subject should begin with a capital T; traid is spelled wrong, so is butes, shus, lether, and thay; there should be a period at the end after presant. But Nancy begins to hesitate; and, as it is a rule to take the seat whenever no further amendments are suggested at a glance, James has the floor. James says peace, soul, maid and whole are wrong. I rally to their defense. James admits there are such words, but denies their propriety in the present connection, to which conclusion I finally agree. Josy has been almost boiling over for his turn. Wacksends is n't right; neither is bensh, apern, cafskin, and shepskin; there should be a period after dirt; then should n't begin begin with a capital.

And so on to the end of the chapter. This revision is continued until the critical acumen of the class discover no further objections. It then, of course, remains for the teacher to direct their attention to any inaccuracies which have escaped them, as well as to caution against those they are likely to commit.

"Now, scholars, you will all hand in a composition on next Monday morning about some trade; any trade you please."

From several months' experience with this plan with my smaller classes, I can speak with the utmost confidence of its success. No recitation can excel it in enthusiasm: while the teacher is writing the performance on the board, inquisitive mouths and eyes follow every word, hardly able to restrain the anxiety to tear it to pieces; and when the desired opportunity is at last given, what a malicious delight they take in exposing every defect!

It may be said that the above *model* presupposes some acquaintance with punctuation and the use of capitals, which all beginners do not possess; but this is not essential to the plan. The main idea wished to be set forth is that in the case of young minds a great part of the imaginary terrorism usually associated with a composition may be removed simply by the teacher's giving them a rough draft of an essay on a subject similar to that on which they are to write: the kind of topics, the intentional errors made, the style, etc., must, of course, vary with circumstances. W. W. D.

STERLING, February, 1862.

LESSONS OF OBEDIENCE.*

SOCIETY is so constituted that the influence of government must every where be felt. A cheerful and hearty submission to rightful authority is perfectly consistent with the freest and fullest development of a manly, independent spirit. It is impossible for any nation to maintain an existence if the people have not learned this first great lesson of life; least of all can a free republic like ours continue if the people have learned to govern but not to obey. It becomes, then, an important inquiry when and where shall this lesson of obedience be acquired. If delayed to adult years, there is no reason to expect it will ever be learned. It must be in the period of childhood and youth; it must be either in the family or in the school. But it is painfully manifest that a large portion of the children of this and every community never learn to yield to authority at home unless it be against their wills. In the public schools all must be brought to the same standard. A spirit of implicit obedience must be secured before any thing else can be attempted; not stolid, unreasoning, servile obedience, which crushes all manliness and self-

* From the Report of W. H. WELLS, Esq., Superintendent of Public Schools, Chicago, for the year 1861.

respect out of the soul, but that intelligent, kindly obedience which recognizes the true relation between parent and child, teacher and pupil, and bows cheerfully and from choice to the decision of another whose character and position render it incumbent upon him to direct.

Here it is, in the public schools, that all the pupils learn a lesson which many of them would never learn elsewhere; a lesson which is essential to the perpetuity of our free goverment. This, if I mistake not, is the most important bond of connection between our free-school system and the state; and in this alone is found a sufficient argument for the support of free schools at the expense of the state.

I have dwelt particularly upon this feature of our school-system, partly because the obligation of the state to this disciplinary element of the schools is not often fully recognized, and partly because we have at the present time so forcible an illustration of the principle in the rebellion of the very states in which this discipline of school-life has been in a great degree wanting.

LITTLE MATTIE.

I.

Dead! Thirteen a month ago!
Short and narrow her life's walk.
Lover's love she could not know
Even by a dream or talk:
Too young to be glad of youth;
Missing honor, labor, rest,
And the warmth of a babe's mouth
At the blossom of her breast.
Must you pity her for this,
And for all the loss it is,—
You, her mother with wet face,
Having had all in your case?

II.

Just so young but yesternight,
Now she is as old as death.
Meek, obedient in your sight,
Gentle to a beck or breath;
Only on last Monday! yours,
Answering you like silver bells

Lightly touched! an hour matures:
You can teach her nothing else.
She has seen the mystery hid
Under Egypt's pyramid:
By those eyelids pale and close
Now she knows what Rhamses knows.

III.

Cross her quiet hands and smooth
Down her patient locks of silk,
Cold and passive as in truth
You your fingers in spilt milk
Drew along a marble floor;
But her lips you can not wring
Into saying a word more,
'Yes', or 'no', or such a thing.
Though you call, and beg, and wreak
Half your soul out in a shriek,
She will lie there in default
And most innocent revolt.

IV.

Ay, and if she spoke, may be
She would answer like the Son,
"What is now 'twixt thee and me?"
Dreadful answer! better none.
Yours on Monday, God's to-day!
Yours, your child, your blood, your heart,
Called—— you called her, did you say,
'Little Mattie' for your part?
Now already it sounds strange,
And you wonder, in this change,
What He calls His angel-creature,
Higher up than you can reach her.

V.

'T was a green and easy world
As she took it! room to play
(Though one's hair might get uncurled
At the far end of the day).
What she suffered she shook off
In the sunshine; what she sinned
She could pray on high enough
To keep safe above the wind.
If reproved by God or you,
'T was to better her, she knew;

And if crossed, she gathered still
'T was to cross out something ill.

VI.

You, you had the right, you thought,
To survey her with sweet scorn,
Poor gay child, you had not caught
Yet the octave stretch forlorn
Of your larger wisdom! Nay,
Now your places are changed so,
In that same superior way
She regards you dull and low
As you did herself, exempt
From life's sorrows. Grand contempt
Of the spirits risen awhile,
Who look back with such a smile!

VII.

There 's the sting of 't. That, I think,
Hurts the most, a thousand fold,
To feel sudden, at a wink,
Some dear child we used to scold,
Praise, love both ways, kiss, and tease,
Teach and tumble as our own,
All its curls about our knees,
Rise up suddenly, full-grown.
Who could wonder such a sight
Made a woman mad outright?
— Show me Michael with the sword
Rather than such angels, Lord!

ELIZABETH BARRETT BROWNING.

FORETHOUGHT AND AFTERTHOUGHT.*

SELF-CONFIDENCE is characteristic of a schoolmaster. All things are possible to him. Acknowledging my share of this, I must yet confess that the possibilities of the present undertaking are of doubtful amount. On the threshold I am confronted by the question Do you realize the nature of your attempt? What is a public lecture? In answering, it may be said that it has no peculiarity in style. It may be dignified or trifling, grave or gay, vehement or moderate; may be in the daintiest manner of Addison; may even murder the President's English — any style, if only it be entertaining. Its range of subjects is not at all restricted. One out of the common roadway of thought will excite interest from its oddity, and

* A lecture delivered before the Chicago Teachers' Institute. By B. Y. AVERELL.

serve just as well as any thing to bind up the miscellaneous ideas the lecturer may have wrought out. Women, men, animals; things in heaven, on earth; science, nonsense; experience, and speculation, are all permissible, if only the audience be entertained.

And as to the occasions upon which a lecture may be read, any occasion of secular interest is appropriate, and any day of the week except Sunday. Perhaps the universal adaptation of this kind of composition is such that the Sunday sermon, even, will give place to the lecture — the pulpit become a desk: Spurgeon expounding the theology of Calvin will become Spurgeon discoursing of the habits of the gorilla and the taming of the shrew, *experimentally*, the London papers suggest.

For what purpose is a lecture? 1st, it may instruct; 2d, it may please; 3d, it may serve as a purgatorial discipline to its author, at the expense of those who listen to it.

If you are disposed to call in question the suitableness of any thing or all that may hereafter be said, please recall to mind the miscellaneous character of a lecture, as just now unfolded, and bear with me while I say a few plain and sober words concerning

FORETHOUGHT AND AFTERTHOUGHT.

Forethought, passing by inferior meanings, is that which precedes an event, as its cause or as sustaining to it some essential relation. It is both a native power and a character: a power, to have intuitions of the future, slight in all cases, but enough for a basis of human action; a character, to plan beforehand, and so plan as to accomplish. Afterthought is not a native power, but rather the lack of it. It turns it back to the future, faces the past, and lives in the present by light of the past. It seeks not to determine an event by design foreformed, but leaves the plan by which the event shall unfold itself to the time of occurrence.

Most of the events of history are afterthoughts. The few battles which constitute epochs in national life are such. No mortal could foresee, none could plan and determine the issue. It was the thought of a moment, the action of impulse, which arbitrated between Greek and Persian, Roman and Carthaginian, Frank and Saracen, monarchy and republic. We will consider the sea-fight at Salamis as a case in point. The countless host of Xerxes had rolled like a huge wave of the Atlantic over Thrace, Thessaly, Bœotia, and Attica, overwhelming and devastating. Athens was in ruins: its women and children had fled to the island of Salamis, which lay close to the Attic mainland. Turning the horns of its crescent toward the Attic shore was the Bay of Salamis, and in its bosom nestled the combined Grecian fleet of three hundred triremes. The Persian fleet, three times as large, was moored at the southern entrance of this straitened bay, leaving the northern open to the escape of the Greeks.

Themistocles, the second savior of Greece, insisted upon fighting the enemy in these narrow waters, for here the Persian numbers would be merely confusion and defeat. However, a stormy council of the Grecian chiefs carried the day against him, and voted to remove into the open sea. Once there, Themistocles well knew that the Greek three hundred would be overwhelmed by the Persian thousand. He besought the Spartan who commanded the combined forces to reverse the decision, and exercised upon the other leaders every element of personal influence. The reassembled council, after a scene of acrimony that is historical, finally decided to remain in their present position; but when this new decision became

known to the Greek captains and sailors terror and confusion fell upon them, and, notwithstanding the superhuman efforts of Themistocles, a third council was summoned. The Grecian hero, sad, weary, and in despair, repaired to his ship. Was all lost? No! An afterthought saved Greece. He would feign treachery — would send a messenger that very night to Xerxes, would advise him of the intended flight of the Greeks, that they were divided in council; he must block up the northern channel and move his fleet into the bay. The next morning's sun saw the Greeks entrapped, and the bravery of desperation won the battle that turned the tide of Persian invasion away from Greece for ever, and gave the world another history.

That precious old fossil, the British Constitution, is an afterthought. The American Constitution, except in its amendments, is a forethought. Its British cousin is all amendments. The Magna Charta was an extortion from King John. Parliamentary power was not built up upon plan and specification, as Westminster Palace, but grew like an oak, so that one scarcely knew that it was growing or had grown, until the wise men of this day made the discovery that once, a long time ago, there was no such thing as a British Constitution. The Habeas-Corpus Act, the Bill of Rights, the Freedom of the Press, are all additions made as the result of experience. Thus you may see in some old English manor-house new erections so numerous and splendid as to obscure the plain but substantial edifice that dates five hundred years ago. An old *fossil*, the Englishman's idol. He worships it as though it fell from heaven, like the black stone in Mecca; but he worships it with his face toward the setting sun. What cares he for a governmental future? And we can fancy that all over England of a Sunday, after the 'amen' has been said to the church creed, he adds: I also believe in the British Constitution, the Magna Charta, the Bill of Rights, the Supremacy of the Seas, the Lords and Ladies, the Speaker of the Commons, both Houses of Parliament, the rules regulations, precedents, decisions, customs and habits appertaining to the same,— *bless them all.*

The honest loyalty of colonial Americans to the mother country a hundred years ago was *notably* shown in the *slowness* with which, in spite of tyranny and insult, we realized that our country was to be independent. Before the Battle of Lexington but one man in all America had a definite plan and purpose for independence — that was Samuel Adams. Even Ben. Franklin distinctly disclaimed the idea. Men clung to old England as a child to its mother, though spurned and spit upon. Circumstances beyond our control made us free. We were forced into that condition; were actually independent long before we declared ourselves to be so. Our nationality, then, was not a thing planned and designed in the minds of the people, but an occurrence which, by us, was merely approved and adopted.

But one more historical afterthought, namely, the events in the life of that enigma, Louis Napoleon: an *enigma*, I believe, simply because he has no settled design or policy for the future; if he had, shrewd diplomatic compilers would soon find it out. While 'my uncle's nephew' intends, and likely enough has always intended, to follow in the footsteps of his prototype, he does not aim to create circumstances, he merely waits for them; when they come to hand improves them to the benefit of the Napoleon family, and of France as its appanage, with an ability that is extraordinary among that stupid race called monarchs. He is a very demigod of opportunity. The glory of the first Napoleon, and the accident of a general election, made him French President; the same glory, personal popularity and a large army, made him French Emperor. A shrewd boxing

of the compass, catching every gale, so that you scarcely knew where next, the French ship of state has every time reached a port of safety, laden with treasured results. But, five sous additional on a loaf of bread, a sudden anger of the Parisian populace, may be the occasion he can not improve, and lay him low beside his uncle. The nations feel that the Napoleonic future does not rest upon forethought, that it will shift away as the clouds do, when this magnificent swindler has been set aside.

I do not deny that in the history of nations there may be events and conditions which are the results of previously-formed designs; but for the most part the future of the nations is not within the scope of man's power or foresight. In the march of events they wheel into line, and whether one be general or private depends upon the war-office above.

Thus far of nations. Individual character, also, furnishes many considerations.

My first proposition is that Education is mostly an afterthought. No disparagement to the pedagogue. Ours is a noble work, important in the extreme; but, after all, we are not masters to plan, but merely servants to follow; we but feed fire to the crucible, watch and attend the seething metal, while the pure gold of character releases itself from non-essential dross. Character is not made; its elements are born with the child. The teacher's business is to discover what it is, if he can, and then draw it out, educate it; although the true God-given character may escape his searchings, and he work upon that which is merely concomitant.

What a difference there is between the manifested and the possible character of most men; that native element of character which might have constituted the man lies heaped over, beneath the accidents of birth, external circumstances, a faulty education, and actual sin, as placers of gold in California lie buried beneath a surface-soil all grown to rank weeds.

A growing boy, full of life and spirit, breaks away from restraint in every direction; the teacher, full of the idea of dignity and propriety, is ever on the alert to head him off. This is the common work of the teacher — heading off, heading off. He may head off in the wrong place. It is not for us to plan how a boy shall develop: with anxious thought we should rather inquire of what sort shall this child be; then let him go in the direction of his bias, making sure that he is so instructed as to go aright. We teachers think too often of our pupils as machines with which to turn out certain results; and mere machines we make of immortal souls (God forgive us!) by insisting that they shall walk in our mechanically-devised pathway. Forethought as to the future characters of our scholars, then, is not our business; our work is a present work — to find out truthfully, and faithfully deal with, each one's native character.

If the education of the boy is an afterthought, none the less so is the life of the man. Getting money is very little to the credit of most persons. It comes without thought, and goes in the same way. Riches have wings; but such as are obtained as the result of deliberate purpose and plan have, at most, very small wings, if not entirely devoid of that ornithological appendage.

Leaving this. Have you ever considered that common specimen of a Chicago citizen who might have been rich if — Do n't walk the streets with him, for every corner-lot suggests a dissertation of so much per foot, and you may so neglect your steps in trying to see the purchases that might have been made as to endanger life and limb, or be taken for a stranger in the city. The man, perhaps old, with slow step and gray hair, sees where, ten, fifteen or twenty years ago, he missed his opportunity; yet, for all that, he is rich: all this property is his in possibility, if not in actuality; he has the enjoyment of wealth without its care,

and we may well doubt whether he does not enjoy the past prospect of wealth as much as the millionaire does his present possession.

So we all live upon the past: whenever we glance to the future it is with meek eye and a humble countenance; we act in the present by sure experience, our lesson is well learned, we seldom go beyond it. Great expectations are rarely the subject-matter of forethought, though they may be of fancy. If, however, some rash piece of immaturity does entertain such, he will soon learn his sorrow, and his feet come to know life's tread-mill. Fame, even, is an afterthought to those who win it. A man wakes up in the morning and finds himself famous. What has he done? A great thing, accidentally; he neither knew it to be great nor designed it such. Another watches all night for fame, and morning does not bring it. What has he not done? Written tomes that no body will read, invented great machines that will not work.

We will now turn our attention to some things which are characterized by *forethought.* It is a quality in some rare men so to see into the future and determine what it is to be that their opinion is eagerly sought after and adopted. Oracles are they, more reliable than the Delphic and much more accessible. This is practical judgment; the possession of which is sure to make a man respected, whatever his literary attainments or his wealth. It deals with things to come, and takes the place of prophecy, as much as any thing can. Thorough observation of all the agencies within the scope of that with respect to which the judgment is pronounced is its first requisite; observation so keen, delicate and discriminating as almost to constitute a fine art, upon men as individuals, upon men as masses, and upon the physical forces which affect the condition and welfare of men.

The second requisite is an equally thorough knowledge of how in times past these agencies have been adjusted to each other and with what result. A third requisite is a foresight, given by nature and perhaps not to be acquired, to determine what will be the effect of new circumstances upon the old agencies, and so to weigh the influence of these as to predict a result. Practical judgment differs from common-sense, which is simply a thorough and accurate employment of the facts of experience. Practical judgment has in it the element of forethought; it deals with future courses of action in the main similar to those which are past, though possessing such new modifying elements as to produce different results, which common-sense can not perceive though practical judgment can.

Men of an intellectual cast have frequently considered merchandising degrading and contemptible. There is ground for this feeling in the wrangling endeavor to gain the advantage, between men making a bargain; in the constant disposition of a shop-keeper to get the most he can for the least price, and sell the least he can for the greatest price. Many trade as the knave clips coin — their gains are what they cheat out of others, not a fair profit or a legitimate saving. Notwithstanding all this, there are princes among the merchants; and it is practical judgment or forethought which makes them such. Perhaps the saving and pinching process is the first or chrysalis state of a great merchant; and as he throws out his ventures trusting to the future to be successful, he must nicely weigh the influences which will modify the agencies of trade. This mental effort broadens his views, enlarges his heart, and makes him, as most merchant princes are, a noble-minded man.

The difference between a shop-keeper and a merchant has its parallel in the politician and the statesman. We despise a politician. Who can help it? He is mean and tricky; his ideas are bounded entirely by the horizon of his own party.

Blind to the future, he cares only for the present and his party. But, woeful as the fact is, the man who seeks to operate upon the masses of men exerts an influence that lives long after he is dead. The politician's thought is not long enough to reach into the future; he neither sees into it nor plans for it: and such are they who are moulding to no small extent the political fortunes of our country. I can not deny that a politician may have in him latent powers that will, under favorable circumstances, develop into statesmanship. We are fully assured that some members of Mr. Lincoln's Cabinet were once politicians,—Are they now statesmen? The statesman looks into the future with an eagle glance. The coiner's scales are not more delicate than are the scales of his judgment, in which he weighs present circumstances and the force of future influences. Burke's prediction concerning the French Revolution seems almost an inspiration from heaven. If the foresight of the statesman is an inspiration from heaven, those of us who pray have need to offer fervent supplications that God will breathe into our rulers, that they may so penetrate the future as to be able to inform us what under the sun we are fighting for at this time present. What merchant would succeed whose only aim was a general one, to get rich? He must not only have a general purpose, but also have his special aims, to make so much money upon certain stocks of flour, wheat, or sugar. We have a national policy, to restore our country's unity; but will some of our statesmen inform us as to the *special* aims of the war, as to the means by which the grand result is to be attained; or will they even inform us that they have such? We would then be content that they keep their own counsels.

If a statesman must have forethought in the form of practical jugdment, how much more the military hero. I say hero with hesitation, for the word has of late been degraded. No man is a hero by accident: it is an intuition of the future; it is a plan so full of possibilities, so full of wisdom, so filled with energizing life as to create events — *that* constitutes a hero. Dr. Marsh says that the moral character of the people shows out in their language, and instances the Italian language, whose 'honesty' is the strength that awes, the cunning which deceives; whose 'assassination' is not a crime, but a mode of facilitating death; whose man of honor is a well-dressed man; that which is foreign is admirable; a brass ear-ring, a joy; a bodkin, a royal munificence; a message by a footman, an embassy. Let us be honest with ourselves: has not our idea of a hero, through the adulation of our valuable press, met with a similar degradation? Is a man a hero who clears out a mud fort with shot and shell, or arrests four rebels on the high seas? 'Honor to whom honor is due' does not require that we should make a hero out of each man who has simply done his duty and nothing more. Trembling generals, with their forts, batteries, camps, and picket-guards, reconnoiter each other with the greatest assiduity, send up balloons, send out brigades, look through field-glasses, and, as the result of all, anxiously ask "What is the enemy going to do?" That is just what the general ought to know. The military hero will know it — will know it in spite of the enemy; will know what the opposing commander does not himself know of his future operations.

If the heart of the nation were to offer up its solemn litany, its general supplication, it would be —

God send us a hero,
For his mercy's sake,
For our forefathers' sake,
For the sake of our glorious history,
For the sake of generations unborn.

God send us a hero,
Because we have sinned,
Because we have forgotten God,
Because we have glorified ourselves,
Because we have blessed the oppressor.

God send us a hero,
To deliver us from inaction,
To teach us for what we fight,
To teach us how to fight,
To hang contractors and confound traitors.

God send us a hero,
And we will praise him,
And we will trust in him,
And we shall conquer,
And we will set the slave free,
So God will send us a hero.

Some ideas are incapable of definition. Such is the idea of genius. So various are its manifestations, so subtle and numerous are the elements which enter into its composition, that it seems impossible to include them all in the longest definition, or even enumerate them.

Nearly all writers upon character undertake to unravel its mysteries; but each new author seems little satisfied with what his predecessors have done, and thinks he himself will be able to master the riddle.

We can not define genius; yet we easily recognize its manifestations, and use the word with as much confidence as if we knew its meaning. Without making so great a blunder as to think of accomplishing what others have failed in, I would propose forethought as its *important* element.

The statesman is a genius; so is the military hero: but the variety of genius about to be considered does not include either. The genius of these two belongs to the reasoning faculty. This new variety is allied with the imagination. The imagination, our philosophers tell us, is a power to create, from materials already in the mind — such as abstract ideas and conceptions of external objects,— new ideas, new pictures; to reädjust, rearrange, according to some method. In other words, it is the power to form conceptions of what was before unknown. It does not analyze, it bodies forth new creations, portrays new pictures of beauty and sublimity; hence it has an outlook for the future. It discards the past; is not satisfied with the present; but lives and labors among the mysteries of the unknown, seeing what unskilled eyes can not see, and hearing what unpracticed ears can not hear. This is the intuitive part of forethought. But there is a plan and a purpose also in imaginative genius. These new creations are not wild fancies, the fruit of insanity, as some pretend. Whatever true genius brings out of the world of the unknown is approved by the maturest judgment as real and natural. Whatever is real and natural has its value in adding to our stock of knowledge — furnishing premises for reasoning or facts for practical use. This intuition, this plan and purpose to drag the unknown from its hiding-place, is the undertaking of the poet and the philosopher, whose influence in moulding character, furnishing new ideas, inventing new appliances for human welfare, can not well be estimated, though too often slighted and regarded as unpractical.

Into what a maze of delusion does our sophistry about the practical lead us. What is the practical? I have my ideas about it, but the next man will totally disagree with me. The most general idea, and the only consistent one with most persons, is that which holds some relation to eating, drinking, sleeping, and wearing clothes. The truth is, every pursuit is practical, though in different degrees. There is no standard. What is essentially practical to one man is essentially unpractical to another, for the simple reason that it is not his business; if it were, it would become practical. The study of logic, to Mansel, the successor of Sir William Hamilton, is as practical as is the manufacture of war-instruments, the last argument of kings.

Teachers are apt to be intensely practical. The best manner of recitation, of handling a topic, the most effective drill-exercise, the best police arrangements, the amount and degree of punishments, are in all their thoughts. The teacher plans for the present, prides himself upon his happy experiences, glories in the

past, and, as a teacher, has as little forethought as any respectable member of society. So busily interested in present success, do we not neglect to think of our future? What is to be our character and personal condition a few years hence? The teacher grows old like the rest of mankind, and as he grows old he wears out. Is it not just as practical to have a rational purpose and plan for our future characters as it is to win success and earn our wages *now?*

Self-culture, then, is practical, and is also a forethought. Without special reference to present exigencies, it looks to the future, chooses a worthy aim in life which is different from and higher than present aims; labors diligently now, expecting results by-and-by, a long time hence, perhaps; resolves there shall be no wearing-out, that the teacher, though old, shall not ever cease to be a fresh man, and that insufferable dogmatism shall not make *him* an unwelcome and disagreeable acquaintance.

The last thing to be considered as a forethought is religion: not that it unfolds the future, but that it plans for it. It teaches us to forget the things that are past. In its exercise experience is of little value to us, and a sad thing to remember. The performance of present duty in the light of future possibilities is that to which it invites us. It would check the ever-rising tide of discouragement, by blotting out the record of yesterday and providing a fresh page for tomorrow's deeds. The Christian's motto is No looking back, no retrogression; ever forward, ever onward, ever upward.

In speaking so fully of forethought and afterthought perhaps I have succeeded in presenting the idea that they are important elements of character; that forethought belongs to a high order of minds, and that its acquisition as a mental habit is of the greatest value. I might, if equal to the attempt, develop the subject still further in discussing the means and methods of its attainment. But it is sufficient to say that forethought in the form of genius, if acquirable at all, would most likely demand for its attainment the best energies and the greater part of our days; that, on the other hand, the kind of forethought which consists in a plan and purpose, such as to insure future results as though they were already present, is within the reach of all.

Live for the future is the great lesson of forethought. No man need read us a homily about care for present things. The fierce necessity of daily bread, of shelter, and a home, will rivet down the wandering purposes. Our difficulty and danger is that we are absorbed in the present. A little circle of cares and duties and purposes gathers around us, and, as years pass, moves on with us, while we float idly on the tide of life, whither bound knowing little and caring less.

Perhaps it may seem pretentious for unambitious people to talk of living for the future; but it is really the only way of living well in the present. If we would some times ask ourselves what will be thought of us after we are dead, we might give occasion for men to think better of us while we are alive. Let a man do what he may; let him court public approval, and rigidly avoid every cause for offense: still, his purposes are misconstrued, his motives maligned, and his actions branded as selfish. So does he fail to win the approving smile he so much covets. But if his purposes reach far into the future, he can trust to that future for success. In being unconcerned what men think of him now, he chooses the path of duty with unwarped judgment, and walks in it with persevering and trustful step. He knows the future will rectify the present; rivalry and envy cease; the evil in him retire into darkness, the good stand out in the

bright light. After we are dead, it will recompense a long life of toil if we can be remembered for good,— not accidental good, not the good that was native in us, but good we ourselves wrought out, good we purposed, good we lived for. Some times, in vision, the angel of the future appears to us bearing the scrolls of human aims. He invites us to choose a noble object and pass a well-spent life in its attainment. On one is written Glory; on another, Fame; on another, Wealth; on another, 'He went about doing good'; and one has no legend at all. Would that the angel gave us the power of choice, for the last is too often our lot. *Forethought* is a glorious vision merely; the stern realities of life, they are *afterthought*.

STATE TEACHERS' DIPLOMA.

STATE CERTIFICATES.— It is proposed to hold the next (third) examination for State Teachers' Certificates at some suitable time and place during the summer.

I make the announcement now, to elicit an expression of opinion from the teachers of the state in respect to the best time and place. It is not material to me. My only wish in the matter is to accommodate the greatest number. It will be taken as a personal favor if all teachers interested in this important movement, whether prospective candidates for diplomas or not, will give their views on these points, in order that I may make the most judicious selection both of time and place. I should be pleased to see the subject discussed in the pages of the *Teacher*, and also to receive expressions of opinion by letter or otherwise.

Any teacher who proposes to be an applicant will, if desired, receive a circular explaining the method and requirements of the examination. I commend this subject to the teachers of the state, and ask for it their interest and coöperation.

Sup't BATEMAN, in March *Teacher*.

IT will be seen by reference to the above announcement that the State Superintendent intends to hold another examination some time during the coming summer for the examination of candidates for the State Teachers' Diploma.

As one of those who are intensely interested in the success of this most important educational movement, and have received the diploma upon examination, I have thought it would perhaps be for the benefit of those who contemplate offering themselves as candidates for this honor to give my impressions, as derived from experience, as to the method thoroughness, fairness and impartiality of the examination.

The law under which the examination was held empowers the Superintendent to examine candidates for the diploma either alone or by a committee whom he may appoint. In compliance with the law, the Superintendent appointed a Board of Examiners composed of pro-

fessional teachers selected from different parts of the state, and known as men of learning and of experience and ability in their profession, whose characters were a sufficient warrant that the examination would be conducted solely for the benefit of the cause of education, uninfluenced by fear, favor, or affection.

The examination was chiefly a written one, and was conducted in the following manner: When the candidates were all assembled, each drew from a box a slip upon which was written a number, and this number was of course known to none but himself. After this, each wrote his name, address, and age, which he inclosed in a sealed envelope, and on the outside of the envelope wrote his number: by this means the name corresponding to each number could be discovered after the examination was over.

Printed slips, containing questions in Orthography, Reading, History of the United States, Geography, Grammar, Mental and Written Arithmetic, Algebra, and Geometry, were prepared by the Superintendent and Committee of Examiners. A certain length of time was allotted to each branch, within which it was expected the candidate would write answers to the questions before him. The writer found that he could usually accomplish the work in the allotted time. The papers upon which the answers were written, headed with the number of the candidate, were turned over and then collected, and thus the numbers remained unknown to the committee.

It is easily seen that perfect fairness and impartiality were thus secured. It will be seen, too, that the feelings of candidates were, as far as possible, respected; for, as their numbers were known to none but themselves, none would be aware of their disappointment should they fail.

The questions were of a general character, such as would serve to show whether the applicant was *well acquainted* with the branch of study under consideration; but did not consist of 'minutiæ' or 'puzzles', such as could be answered only by those who had made these branches subjects of special study. The questions were so framed, and the examination so conducted, as to ascertain whether the candidates were acquainted with those *leading and general principles* in each branch of study which imply a thorough but not necessarily *minute* and *critical* knowledge of the subject.

The award of the committee was made and announced in such a manner as not to embarrass the unsuccessful candidates: the numbers of those who were successful were read to the candidates, and they were requested to call upon the Superintendent between certain hours and receive their diplomas.

In this manner all that was possible was done to render the examination thorough, fair, and impartial, and as little embarrassing to the unsuccessful as possible.

We have written the above because we would remove every obstacle that might deter *worthy* persons from presenting themselves as candidates for the diploma; we know there are those worthy of this honor in point of character and scholarship who have been ignorant of the character of the examination, and, being distrustful of their success, have therefore hesitated to make the attempt. We hope such persons will delay no longer: the honor and efficiency of our profession in the future is greatly dependent on the success of this movement.

For years past, in the school-room, in the county institute, in the State Association, in the *Teacher*, before the State Legislature when advocating the claims of the Normal School, we have been asserting the right of 'teaching' to a legal and general recognition as a *learned profession;* and now, when, through the continued and energetic efforts of our State Superintendent, himself an experienced teacher, who understands fully and is devoted to the interests of his profession, with the coöperation of a few others, a most feasible plan is inaugurated for the accomplishment of this long-desired end, it is *imperative* upon those who are actuated by a due regard for the dignity and efficiency of their profession to step forth at once and enroll themselves among the legally-recognized professional teachers.

Already a goodly number, among whom are some of the most eminent teachers in the state, hold this certificate, and we sincerely hope the next examination will double the number.

ONE WHO WAS THERE.

THE PUZZLES OF 'ULYSSES'.

An analysis of the arithmetical puzzles of 'Ulysses' in the *Teacher* for March has brought to light the following principles, or properties of numbers, some of which are not mentioned in any of the arithmetics with which I am familiar:

Principle a.—The unit figure in the root of every perfect cube must be such a number as, involved twice, will give the same figure as the unit figure in the cube. It is easily demonstrated that 1, 4, 5, 6, 9 and 0 reproduce themselves as the unit figure of their cubes; and that 2 produces 8, 8 produces 2, 7 produces 3, and 3 gives 7. Hence,

if the last figure in the perfect cube is 8, the last figure in the root *must be* 2.

Principle b.—The *first* figure in the root must be the root of the greatest exact cube in the first or left-hand period. Thus, if the first period is any number between 63 and 125, the first figure in the root must be 4.

Principle c.—If we write three figures and then repeat (the first figure not to be a cipher)—as 413413, 201201,—the entire number is exactly divisible by 11, and every quotient of such a number (not using 11 or its multiples as divisors) will be a multiple of 11. *If a perfect cube is a multiple of any prime number, the cube-root will also be its multiple.* If we subtract a multiple of any number from another multiple, the remainder will also be its multiple.

Principle d.—The following properties pertain to every multiple of 11 which contains *three* figures: If the sum of the *first* and *last* figures is less than 10 (it never is exactly 10), their sum is the *middle* figure, as 286, 990, 374. If the sum of the first and last figures exceeds 10, the middle figure will be the *unit* figure of their sum *less one.* Thus, if 5 is the first figure and 6 the last, the middle figure will be 0 (506); if 8 and 7 are the extreme figures, the middle figure will be 4, as 748, 847.

In the case supposed, knowing the three figures, we can easily determine what is the quotient, dividing by 11. If the middle figure equals the sum of the others, the last must occupy the units' place in the quotient, and the first tens' place, as $352 \div 11 = 32$; if the middle figure is less than the sum of the others, the last must be in units' place, and the first *less one* in tens' place, as $902 \div 11 = 82$.

Principle e.—Every number formed as described in *Prin. c* is exactly divisible by 91, and hence by 7 and 13.

These principles enable us to unravel the puzzles of 'Ulysses'. In his preliminary remarks he says "It occurred to me that I might, perhaps, by a mental operation ascertain the root [of 9,123,329], as the teacher pronounced it a perfect cube; and within a minute after I thought of it I said to the teacher 'the root is 209'. Following out my discovery, I soon found myself able to give, by mental operation only, and almost instantly, the cube-roots of all perfect cubes expressed by 4, 5 or 6 figures; and in the same way the cube-roots of all perfect cubes expressed by 7, 8 or 9 figures."

He determined the cube-root of 9,123,329 thus: After learning that it is a perfect cube, he ascertained that it is exactly divisible by 11; hence its root is divisible by 11 (*Prin. c*). The units' figure in the root (by *Prin. a*) must be 9; the first figure (by *Prin. b*) must be

2. As there are three periods, by the well-known law of cubes we know that there are three figures in the root, and (by *Prin. d*) the middle figure must be 0, for 2+9=11.

If the perfect cube contains 4, 5 or 6 figures—that is, if it is a cube of two periods,—there must be just *two* figures in the root, and these two can be determined at a glance (by *Prins. a* and *b*).

As one-tenth part of all perfect cubes are cubes of 11 or some multiple of 11, we are enabled by these principles to ascertain almost instantly the cube-roots of one-tenth of all perfect cubes expressed by 7, 8 or 9 figures—that is, cubes of three periods.

In Case I the directions are—Write three figures and then repeat, none of them to be a cipher. (This gives a multiple of 11. The ciphers are excluded lest the puzzle should be too easily solved.) Divide by 7; then by any exact divisor less than 10; again, the same; then by 13. (He takes care that 11 shall not be used as a divisor, and he knows that 7 and 13 must be exact divisors.) Then, learning there are *three* figures in the last quotient, he directs the cubing of it, and asks "How many figures in the power?" (This is necessary; for the number of figures in the first period must be known.) Supplying the place of the middle three figures with x, the power is given,—'6,5xx,x03'. The last figure, '3', shows that the unit figure of the root must be 7; the first *period*, '6', shows that the first figure in the root is 1. As the root is a multiple of 11, and as 1+7=8, the root is 187. The *first period* and the *last figure* in the cube were all he needed, and all he used, to obtain the root; and he caused others to be given in order to conceal the clue. In another case (to lead us on a false scent) he has the cube written '6,x3x,2x3'.

The second and third cases differ from the first only in the methods of *reducing the number to three figures, retaining* 11 *as a factor.* This may be done by repeated divisions, and by subtracting *multiples* of 11. If the number is above 500 it may be best to reduce it, for convenience in cubing.

In Case IV he directs that some even number between 20 and 100 be taken. (If he had taken less than 20 or more than 100, the subsequent operations might not have produced a number of *three* figures to be cubed.) Multiply by 9; by 6; annex a cipher; subtract the number first taken. (These operations produce 539 times the number taken; and 539=49×11, and hence is twice divisible by 7.) Divide by 7; by 2; by 7. (An *even* number was taken; hence 2 is a factor.) Cube, etc., as before. If he had divided only by 49, or 7×7, it is evident that the quotient would have been 11 times the number taken; but as he also divided by 2, the quotient is 11 times one-half the num-

ber taken. Finding the cube-root (in the manner before described) to be 187, he ascertains that one-eleventh of it is 17, which equals one-half the number taken.

In the fifth case, a number between 30 and 100, and a multiple of 3, was taken. This, by the subsequent operations, gives three figures in the number to be cubed, and enables him to use 3 as a divisor, making the number to be cubed 11 times one-third of the number taken.

The essential thing in these puzzles is to produce a number to be cubed which *is expressed by three figures and is a multiple of* 11. As Ulysses says, the methods of doing this 'are almost endless'.

In searching for the key to these puzzles (which I obtained from Case IV), the following facts were ascertained: they were altogether new to me; some of them may be new to others. If we write any one figure *six* times (as 222,222, 999,999), the entire number is exactly divisible by 7 and 13, and also by 11. If we write any *two* figures *three* times (as 383,838, 707,070), the entire number is a multiple of 7 and 13. These numbers will also exactly divide such numbers as 10,101, 50,505, 60,606. Such numbers as 2,002, 3,003, 7,007, 8,008, are exactly divisible by 7, 13, and 11. As 7 and 13 are prime to each other, what is divisible by them is divisible by their product.

Allow me to thank your correspondont for a few hours' pleasant and profitable entertainment, and to express the hope that our modern 'Ulysses' will continue his 'wanderings' over the arithmetical seas, and not fail to report what he discovers that is 'new, strange, and wonderful'. H.

Galena, March 15, 1862.

[Note.—Our correspondent has succeeded finely in unraveling the puzzles of Ulysses. He might, however, have improved his wording of the second part of Principle *d*; and his reason for taking a number more than twenty and less than one hundred is not the true one. Will he look these points over again? He will find food for thought in the article of Ulysses in this number, which is the second in what we hope will be a series of several articles.—B.]

I hold that the state has a right to compel parents to take advantage of the means of educating their children. If it can punish them for crime, it should have the power of preventing them from committing it, by giving them the habits and the education that are the surest safeguards. Hon. Josiah Quincy.

COMMENTS ON THE SCHOOL LAW.

DEPARTMENT OF PUBLIC INSTRUCTION,
Springfield, Ill., April, 1862.

REMARKS ON THE 42D SECTION.

THE manner of calling and conducting all meetings for the election of directors is given in Section 42. It is there provided that 'in case of a tie, the judges shall decide it by lot on the day of election'. It is held that this does not apply to other district elections, such as are provided for in the 48th and other sections of the Act. The language of the 48th section is: "No school-site shall be purchased, nor shall a school-house be erected, located, purchased, or changed, nor shall a tax be levied to extend schools beyond six months, without the consent of *a majority* of the votes cast," etc.

It will therefore be understood that in all district elections, except for directors, there must be a *clear majority* in favor of the proposition or propositions voted on, in order to render the election valid. If there is *a tie*, the proposition *fails*, and there must be another vote. For, in the case of a tie, the votes for and against a given proposition are equal, whereas the law requires a majority. The judges can not, in such cases, decide it by lot.

It may not be amiss to note here the distinction between a *majority vote* and a *plurality vote*. The former means more than half of all the votes given; the latter means more than any other, but less than half of the whole number given. A plurality vote elects in the case of directors; in all other district elections a majority vote is necessary. If, in an election for directors, A gets 10 votes, B gets 8, and C gets 6, A is elected; because, although he did not get a majority (or more than half of all the votes cast), he got more than any other candidate, which is all the law requires in such elections. But if an election is called to select or locate a school-site, for example, and 10 votes are cast for one site, and 8 for another, and 6 for a third, there is no choice, because in this case the majority rule governs, and not the plurality rule; and hence there can be no legal choice until some one site receives a clear majority of all the votes, which, in the case supposed, would be 13. The same rule applies in voting to build school-houses, levy taxes to extend schools, and, in brief, to all district elections, except for directors.

Another fact of importance in this section is that in all district elections the notices must distinctly state the question or questions to

be voted on. This is expressly required in Section 42, and the requirement is repeated in Section 48. No other questions or propositions can properly be entertained and voted on by the citizens when assembled, except those specified in the notices. This is evident not only by inference from the requirement itself (for it would be absurd for the law to insist that the objects of the meeting should be named in the call if it were not intended to restrict the action of the meeting to said objects), but also because it would be unfair and unjust to spring questions upon the meeting which there had been no time to consider, and for which the voters were wholly unprepared. Nor would it be less unfair to embarrass or endanger the success of the propositions named in the call by permitting the votes to be divided upon issues not so specified.

If we are correct in these views, it follows that in all district elections the voters are restricted to the points or propositions stated in the call, and that all votes cast for or against any question or proposition not so stated are void, and should be thrown out by the judges. If the election, for example, is called to vote for or against a tax to extend schools, and no other purpose is specified in the notices, then all votes cast at said election for locating or building a school-house, or for any other proposition beside the one specified in the call, are void, and should be disregarded by the judges. Again: If the election is ordered to fix upon a site, and some definite number of points are expressly designated in the notices, to be voted on, then all votes cast for any site not designated in said notices are void, having no effect upon the result, either one way or the other.

The poll-book, with the certificate of the judges and clerk, should in all cases be returned to the township treasurer, and filed by him as evidence of the election — not only in case of elections for directors, but of all other district elections. This is expressly required (Section 42) in elections for directors, and it is held that all the regulations of that section which relate to the manner of conducting elections for directors apply to all other district elections, *unless otherwise provided by law*, as herein before mentioned, in respect to the majority rule, etc. If further reasons were needed in support of this view, they would be found in the fact that, under the present law, the directors are themselves the judges and clerk in all elections, and they should not therefore receive and file their own poll-book; and in the further fact that it affords additional security against irregular, unlawful or pretended elections, and therefore subserves the public interest. The returns of every election must be filed some where. It is manifest that the judges and clerk of an election are not the proper

officers to receive and file their own returns, for this would open the door to fraud and defeat the system of checks contemplated by law. But in the case of district elections the township treasurer is the only officer designated to file the returns: after an election of directors it is peremptorily required that the poll-book shall be filed with that officer; and from the silence of the law in respect to the returns of other district elections, it may safely be inferred that it is intended they should take the same course. And even if this legal view should not seem conclusive, there are still sufficient reasons of a prudential character to recommend the course indicated. [See, also, Laws of Illinois, 1861, pp. 268–9.]

The poll-book and certificate should be returned to the township treasurer *as soon as practicable* after every election, that the proper evidence thereof may be on file for the information of all concerned. Until this is done there is no legal evidence of said election.

It will be observed that the time of opening and closing the polls is left to the discretion of the directors; but the length of time the polls are to be open must be distinctly stated in the notices, and the time so specified should be strictly adhered to by the judges, the same being neither increased nor diminished. The time chosen for the election should be the one most favorable for a general attendance of the voters, and the polls should in all cases be kept open long enough for all to vote.

Directors can only be elected on a Monday; other district elections may be held on any week-day.

The impression prevails extensively that the provisions of the late Act regulating elections (Laws, 1861, pp. 268–9, §§ 5, 6, 7, and 8) do not apply to elections in townships and school-districts; that said elections are to be excepted from the operation of the general rule; that they are to some extent anomalous in character, and may be conducted either by ballot or viva voce, without much regard to formalities.

The opinion is confidently entertained that the law above cited is mandatory, and not merely advisory, and that it applies, in the words of the 8th section thereof, 'to all general and special elections, whether for general, town, municipal, or other officers', including, of course, all township and school-district elections. It may be said that the provisions of the Act referred to are burdensome, inconvenient, and unnecessary, and that they should not be enforced in the case of local school elections; but those provisions are expressly declared to govern 'all elections, general or special'; no exceptions are made, and the safe rule is to comply strictly with the requirements of the Act. I would

call the special attention of school-officers, voters, and judges of school elections, to the late Act already referred to.

The vote at all school elections should be by ballot.

As stated in a former circular, the acts of school-directors or other officers *de facto*, claiming to hold their offices under color of right, are valid so far as other parties or the public are concerned. This class of cases includes officers elected notwithstanding there may have been some informality in the election. But it will be understood that this rule has been laid down by the courts for the protection of the public and of innocent parties, not to sanction or palliate irregularities at elections.

The section under review also makes it the duty of the township treasurer to inspect the records of the several boards of directors in his township, and to see that said records are properly kept, and 'in a well-bound book provided for the purpose'. It is hoped that treasurers will faithfully perform this duty, and do all they can by their aid and advice to bring about a uniform and reliable system of district records. They will be more than repaid in the increased facilities afforded them in making out their annual reports to the school commissioner.

SCHEDULES.

The Act of February 22, 1861, requires all schedules to exhibit the following particulars, in addition to those previously required, viz:

1. The whole number of scholars, males and females separately.
2. The average daily attendance.
3. The age of each pupil.

(School-Law, Sec. 53, p. 22.)

Schedules which do not set forth these additional facts, as required in the form and instructions contained in Section 53 of the late Act, will not be legal, and school-directors will certify no schedules hereafter which are not kept as above required. And if schedules in which said facts are not set forth should hereafter be returned to township treasurers, they may be rejected on the ground that they are not kept in manner and form as required by law.

As nearly five months of the school-year had elapsed when the new law came in force, I did not include the 'average daily attendance' in the blanks issued to school commissioners for the year 1861. It will be required in the returns for the current year, the blanks for which will soon be issued. It is an item of much importance, enabling us to estimate the extent of loss from absenteeism, and the evils thus resulting; and I am very desirous that the reports on this point for 1862 shall be full from every county in the state.

The average daily attendance, in a *given school*, is found by dividing the grand total number of days' attendance for the whole term by the number of days taught in said term. Thus: Suppose the grand total number of days' attendance during a term of 60 days is 1480. Dividing the latter by the former, we have 24.6, the average daily attendance sought. Comparing this result with the number of pupils registered, we see at once the loss from irregular attendance. If, in the case supposed, the number of scholars was 30, and if each one had been present every day, the grand total number of days would have been 1800, and the average daily attendance would have been identical with the number of scholars, or 30. Hence we see that the loss from absenteeism, reckoned in *days*, was 320; reckoned in average *attendance*, 5.4; and then by comparing the data in either case — that is, by finding the ratio of 320 to 1480, or of 5.4 to 24.6,— we have the *percentage* of loss, which, in this case, is nearly 22 per cent.

I have given this simple illustration to show the important uses to be made of the average daily attendance, and to remove every difficulty from the way of teachers who may not be accustomed to such statistics. The process is too plain and simple to be misunderstood, being merely the dividing of one number by another.

To find the average daily attendance in a given *township*, the treasurer has only to add the averages given in the several schedules, and divide by the number of schedules returned. Thus: Suppose that during the school-year ending October 11, 1862, a township treasurer should receive 7 schedules, the average daily attendance in each of which, as returned by the teachers, should be as follows:

1st	Schedule;	average	daily	attendance	reported	14.7
2d	"	"	"	"	"	25.3
3d	"	"	"	"	"	17.9
4th	"	"	"	"	"	35.1
5th	"	"	"	"	"	29.6
6th	"	"	"	"	"	42.5
7th	"	"	"	"	"	37.4
	Adding the column of averages, we have					202.5

Dividing by 7, the number of schedules returned, we have 28.9, the average daily attendance in the township.

In like manner, to find the average daily attendance in a given *county*, the school commissioner simply adds up the several township averages returned to him by the township treasurers, and divides the amount by the number of such township averages returned.

The division, in each case, need only be carried to one decimal place.

It will be seen in this case, as in all others, that the ability of each succeeding school-officer to furnish the statistics and perform the duties required of him depends upon the fidelity with which the preceding officer or person has discharged his duties. The failure of one embarrasses all. A single error vitiates the final result. A mistake in division, made through carelessness in the teacher, runs along through the township, county and state averages, and is perpetuated in the tables of the biennial report. If each performs his part at the right time and in the right manner, all is plain and easy, and the results certain; if any are delinquent, all is confusion and difficulty, and the results unreliable or worthless.

It is the easiest thing in the world for the teacher, by the rule given, to find the average daily attendance of his school; yet upon this first step each succeeding one depends. If correct school averages go up to the township treasurers, simple addition and division gives them correct township averages; and these being transmitted to the school commissioners, they are enabled to report correct county averages to the superintendent, and he thereby to find the true average for the whole state.

I earnestly request the kind coöperation of teachers, directors, township treasurers, and school commissioners, in securing full and reliable returns on this important point for the current school-year. Printed schedules, adapted to the present law, can be obtained for a trifle of all our principal booksellers and stationers.

FINES, PENALTIES, AND FORFEITURES.

Section 82 provides that all fines, penalties and forfeitures specified therein, except those imposed for trespass on school-lands and for violation of town and city ordinances, shall be paid to the school commissioner, and be distributed by him '*in the same manner as the common-school funds of the state are distributed*'. The law is peremptory — no discretion is allowed — the funds in question must be *distributed* as required in section 16; they can not be added to the principal of the county fund; they can not be separately loaned.

Clear as the language is, and explicit as former instructions on the subject have been, it is difficult to see how any school commissioner can assume the responsibility of disposing of such fines, etc., in any other way than that prescribed in the law. And yet instances continue to occur where those funds are added to the principal of the county fund and loaned as such, or are placed separately at interest. This is illegal; and in all cases where such funds have been separately loaned, so that the notes can be identified, said notes should be col-

lected at maturity and not renewed, and the several amounts so collected be distributed to the townships, with the common-school funds of the state, as provided by law.

It may be matter of regret that the legislature did not authorize the funds in question to be loaned as principal, or added to the county fund; but it is certain that such authority is *not* given, but expressly withheld, and school commissioners must govern themselves accordingly.

The law requiring all officers concerned to pay to the school commissioner, after collection, is highly penal in charater, declaring that each of said officers failing or refusing to pay as aforesaid 'shall forfeit and pay *double* the amount of such fine, penalty, or forfeiture'. It is the duty of the school commissioner, as the representative of the school-fund of the county, to recover the amount of such fines, etc., so collected and withheld, together with penal damages, in a civil action; and it is also within his discretion to compel the collection of fines assessed and which stand in judgment, and he may, if the interests of the school fund require it, employ an attorney or other agent to act in his name, by suit or otherwise, and enforce compliance with the provisions of said 82d section; and the necessary expenses incurred in such proceedings may be paid from the fines, etc., thereby collected, or from the school fund. It is better to pay out a little, if necessary, to recover a large sum, than to lose all. Where such suits are successful no costs can be charged. (See Sec. 78.) So much of these remarks as relates to proceedings to enforce the collection of fines assessed aplies, of course, only when justices, clerks, etc., refuse to issue executions.

FORM OF TOWNSHIP TREASURER'S BOND.

In the second line of the form of bond (Act 1861, § 55, p. 24) the blank after the words 'unto the board of' should be filled as follows: 'Trustees of Township No. —, Range No. —'; giving definitely the township and range. The blank is some times filled with the single word 'Trustees', which is too vague, and of questionable legal validity. There are a great many boards of trustees in the county; and unless the blank is filled with a complete description of the township, as above suggested, there is nothing to show the particular board of trustees to whom the treasurer is holden, nor what particular board would be authorized to sue him on his bond for malfeasance in office, as provided in Section 64, *et al.* The blank in the second line of the form should, therefore, be filled as specifically as that in the *eighth* line, that the identity of the two may be manifest.

LAWS RELATING TO SWAMP LANDS, ETC.

I have been requested to refer to those laws which relate to swamp lands and swamp-land funds, for the convenience of those who may wish to consult them. Those who desire information on this subject will find it in

Statutes Ill. (Scates, Treat and Blackwell), pp. 1146–1164.
Laws Ill., 1857, pp. 925, 1206, 1346.
Laws Ill., 1859, pp. 201–204, etc.

EDUCATION IN THE NEW STATE CONSTITUTION.

The following article on Education, as finally reported from the Committee on Revision, was adopted by the Constitutional Convention:

Article X.—Education.

Section 1. The general assembly shall encourage, by all suitable means, the promotion of intellectual, scientific, moral and agricultural improvement.

Sec. 2. The principal of all funds and moneys arising from the sale of lands and other property which have been or may hereafter be granted, intrusted or donated to this state for educational purposes shall for ever be held inviolate; and the income arising therefrom shall be applied to the support of common schools.

Sec. 3. The general assembly shall provide for a uniform, thorough and efficient system of free schools throughout the state.

Sec. 4. There shall be a State Superintendent of Public Instruction, who shall be elected at the same time and in the same manner as members of the general assembly, who shall hold his office for two years, and until his successor shall be elected and qualified; whose powers, duties and compensation shall be prescribed by law; which compensation shall not be altered during his term of office, and he shall receive no other allowance whatever.

I congratulate the friends of common schools that the claims of this most important public interest, for which they have so long labored and prayed and hoped, have at last been formally recognized and acknowledged in the organic law of the state, and that the Department of Public Instruction has been removed from the contingencies of biennial legislation, and will henceforth constitute a coördinate branch of the state government. The Article is not all that could have been desired — not fully up to the claims of the most enlightened public sentiment of the state and of the age; but it is a most decided step in the right direction, and will be hailed as such with the liveliest satisfaction by every friend of free schools in the state. Thank God for this substantial evidence of progress; this gratifying proof that, even amid the noise of war, the din of battle, and the fearful convulsions of the times, the children of the state have not been forgotten, the safeguards of future prosperity and freedom have not been neglected.

The Article was adopted, after protracted discussion, by an almost unanimous vote. The men who, without distinction of section or party, so firmly stood by it, and so ably and eloquently maintained and enforced the principles which it embodies, have laid up for themselves rich treasures of blessing in the hearts of the people. The world moves.

NEWTON BATEMAN, Sup't Public Instruction.

MATHEMATICAL.

CONCERNING CERTAIN SQUARE NUMBERS.—In the fourth volume of the *Illinois Teacher*, pages 383, 384 (Dec. 1858), we find the following on the subject of square numbers equal to the sum of other square numbers:

"In answer to the inquiry of Mr. J. M. Blackford, jr., 'D. R. S.' furnishes the following:

"Mr. J. M. Blackford, jr., asks 'Is there any known rectangle other than 3 and 4 and its proportionals, the diagonal of which is commensurable with its sides?'

"There is *occasionally* such a rectangle to be found; indeed, one would risk but little in saying that they are to be met with *frequently, very* frequently: for instance, 5 and 12, 7 and 24, 11 and 60, 13 and 84, 17 and 144, 19 and 180, 23 and 264, and so *on* to the '*end of the chapter*'.

"J. M. B. may be aware of this frequency: should he fail to be so, however, he need consider it no disgrace, for he is not alone. The memory of the writer serves him but poorly; still, he has a distinct recollection of the fact that a certain mathematician — one, too, whose acquirements as such had long been the wonder and admiration of his friends,— when asked this same question with regard to rectangles, worded precisely as above, replied in quite decided terms to the effect that there were *none* of the kind inquired for, stating that he had bestowed upon the query considerable thought! And yet, *in* the long procession of numbers, there is not *one, be it a multiple of* 3, *or of* 4, *or of neither, even or odd, composite or prime, whose square has not a corresponding square which denotes the difference between itself and a third number which is the product of some other number repeated as many times as it contains units.*"

The statement of D. R. S. was not accompanied by any demonstration, and moreover is not exactly correct: the first two prime numbers, 1 and 2, must be excepted. I will give the statement thus: *To the square of any number greater than* 2 *may be added some other square such that the sum of the two squares shall be itself a square.* This can be shown by simple processes of arithmetic and algebra. That the proposition can not be extended to include 1 and 2 we soon find

by trial: $1^2+2^2=5$; $1^2+3^2=10$; $1^2+4^2=17$: we see that as we continue the trial the sum of the two squares is less than the next larger square, and the deficiency increases, which is successively represented by the series of even numbers, 4, 6, 8, 10, etc. Try 2 in the same way: $2^2+2^2=8$; $2^2+3^2=13$; $2^2+4^2=20$: these, as before, show successive deficiencies represented by the series of odd numbers, 1, 3, 5, 7, etc.: that is, the successive sums lack 1, 3, 5, 7, 9, etc., of the next larger square, and more of any other square.

In examining and proving my proposition I shall divide it into three cases: Case I, the squares of odd numbers; Case II, the squares of multiples of odd numbers; and Case III, the squares of even numbers above 2.

Case I.—To show that to the square of any odd number another square can be added such that the sum of the squares shall be itself a square. I postulate (and let the reader prove for himself) that the square of every odd number is itself an odd number. Let us next study the series of squares.

TABLE A.

$1^2+3=2^2$	$4^2+9=5^2$	$7^2+15=8^2$	$10^2+21=11^2$
$2^2+5=3^2$	$5^2+11=6^2$	$8^2+17=9^2$	$11^2+23=12^2$
$3^2+7=4^2$	$6^2+13=7^2$	$9^2+19=10^2$	$12^2+25=13^2$

We soon see the law of the series: to any given square we must add some odd number to get the next larger square; and thus in continuing the series of squares all the odd numbers in succession will be used. We see, too, that to ascertain what square is made by the addition of any given odd number to a square, we need only add 1 to the odd number and divide the sum by 2, and we shall have the root of the square sought; and if we subtract 1 from the odd number and divide by 2, we have the root of the square to which the odd number is added. For example: What square is made in this way by the addition of 25? of 49? and to what are they added? *Ans.* $\frac{25+1}{2}=13$; $\frac{25-1}{2}=12$; then $12^2+25=13^2$: $\frac{49+1}{2}=25$; $\frac{49-1}{2}=24$; then $24^2+49=25^2$. Or, to give the same results in a different form, $12^2+5^2=13^2$; and $24^2+7^2=25^2$. Take another example: To what square may we add 101^2 to obtain a third square? *Ans.* $101^2=10201$; $\frac{10201+1}{2}=5101$; $\frac{10201-1}{2}=5100$; then $5100^2+101^2=5101^2$.

We may now, then, put in a column the list of squares of odd numbers and ascertain to what square numbers they may be added to produce squares. Here is a short table of such.

TABLE B.

$4^2+3^2(=9)=5^2$	$112^2+15^2(=225)=113^2$
$12^2+5^2(=25)=13^2$	$144^2+17^2(=289)=145^2$
$24^2+7^2(=49)=25^2$	$180^2+19^2(=361)=181^2$
$40^2+9^2(=81)=41^2$	$220^2+21^2(=441)=221^2$
$60^2+11^2(=121)=61^2$	$264^2+23^2(=529)=265^2$
$84^2+13^2(=169)=85^2$	$312^2+25^2(=625)=313^2$

But let us ascertain the law of the series of roots in the first column, and we shall not need so much calculation. 4 is 8 less than 12; 12 is 12 less than 24; 24 is 16 less than 40; 40 is 20 less than 60: in short, *the differences between the successive roots increase by* 4. We can then begin our series at any point, and, after ascertaining two terms, continue it easily. Let us begin with 41^2 in the second column: $41^2=1681$; $\frac{1681+1}{2}=841$; $\frac{1681-1}{2}=840$: then $840^2+41^2=841^2$. Next, $43^2=1849$; $\frac{1849+1}{2}=925$; $\frac{1849-1}{2}=924$: then $924^2+43^2=925^2$. The difference between 840 and 924 is 84: the next difference must be 88, and so on.

TABLE C.

$760+80=840\ldots 840^2+41^2=841^2$	The student can now
$840+84=924\ldots 924^2+43^2=925^2$	solve all examples under
$924+88=1012\ldots 1012^2+45^2=1013^2$	Case I: he can find some sup-
$1012+92=1104\ldots 1104^2+47^2=1105^2$	plementary square which
$1104+96=1200\ldots 1200^2+49^2=1201^2$	added to the square of any

given odd number will produce a third square: and in all cases he will find the supplementary square to be the square of some multiple of 4.

Case II.—To show that to the square of any multiple of any odd number some other square can be added such that the sum of the squares shall itself be a square. To prove this I shall resort to algebra. Let c represent any odd number, and n any number by which it is to be multiplied: I must show that to $(nc)^2$ some other square may be added such that the sum of the squares shall itself be a square. Let b^2=the square which according to Case I may be added to c^2 (square of the given odd number) to make a third square, which I represent by m^2: then $c^2+b^2=m^2$; and the value of all the terms can be ascertained when c is given. Multiply all terms of the equation by n^2: $n^2c^2+n^2b^2=n^2m^2$. But this is the same as $(nc)^2+(nb)^2=(nm)^2$; a formula which proves the proposition, since to the square of any multiple of any odd number $(nc)^2$ some other square $(nb)^2$ may be added to make a third square $(nm)^2$; and all values can be ascertained when

c, the odd number, and n, the other factor of the multiple, are given. To apply the principle, take Table B, letting c^2 be represented by the squares of the odd numbers successively, b^2 by the corresponding numbers in the first column, m^2 by the corresponding sums, and n by various multipliers.

TABLE D.

$4^2 + 3^2 = 5^2$	$24^2 + 7^2 = 25^2$
$(2\times 4)^2 + (2\times 3)^2 = (2\times 5)^2$	$(2\times 24)^2 + (2\times 7)^2 = (2\times 25)^2$
$(3\times 4)^2 + (3\times 3)^2 = (3\times 5)^2$	$(3\times 24)^2 + (3\times 7)^2 = (3\times 25)^2$
$(4\times 4)^2 + (4\times 3)^2 = (4\times 5)^2$	$40^2 + 9^2 = 41^2$
$(5\times 4)^2 + (5\times 3)^2 = (5\times 5)^2$	$(7\times 40)^2 + (7\times 9)^2 = (7\times 41)^2$
$12^2 + 5^2 = 13^2$	$(11\times 40)^2 + (11\times 9)^2 = (11\times 41)^2$
$(2\times 12)^2 + (2\times 5)^2 = (2\times 13)^2$	$144^2 + 17^2 = 145^2$
$(3\times 12)^2 + (3\times 5)^2 = (3\times 13)^2$	$(19\times 144)^2 + (19\times 17)^2 = (19\times 145)^2$

The method of calculating squares for all multiples of odd numbers from a continued table like B or C is by these examples made apparent.

Case III.—To show that to the square of any even number above 2 another square may be added such that the sum of the squares shall be itself a square. Now the even numbers above 2 either are (1) multiples of some odd number by 2 or its powers, and are covered by Case II, or are (2) themselves powers of 2. This latter case needs no proof. Now 4 is the first multiple of 2 by itself, and we know that $4^2+3^2=5^2$. Now let $c=4$, $b=3$, $m=5$, and n any power of 2. Then the demonstration of Case II may be repeated with a new application, since nc may be taken as 4 or any higher power of 2, and Case III is proved.

$4^2+ 3^2= 5^2$	$(4\times 4)^2+(4\times 3)^2=(4\times 5)^2$
$(2\times 4)^2+(2\times 3)^2=(2\times 5)^2$	$(16\times 4)^2+(16\times 3)^2=(16\times 5)^2$

I will now give a table of the squares of the numbers from 3 to 30, with supplementary squares which being added produce other squares. It will be found that some squares have more than one supplementary square, as is shown at the end of the table.

$3^2+ 4^2= 5^2$	$13^2+ 84^2= 85^2$	$23^2+264^2=265^2$
$4^2+ 3^2= 5^2$	$14^2+ 48^2= 50^2$	$24^2+ 10^2= 26^{2*}$
$5^2+12^2=13^2$	$15^2+112^2=113^{2*}$	$25^2+312^2=313^{2*}$
$6^2+ 8^2=10^2$	$16^2+ 12^2= 20^2$	$26^2+168^2=170^2$
$7^2+24^2=25^2$	$17^2+144^2=145^2$	$27^2+364^2=365^{2*}$
$8^2+ 6^2=10^2$	$18^2+ 24^2= 30^{2*}$	$28^2+ 96^2=100^{2*}$
$9^2+40^2=41^{2*}$	$19^2+180^2=181^2$	$29^2+420^2=421^2$
$10^2+24^2=26^2$	$20^2+ 48^2= 52^{2*}$	$30^2+ 40^2= 50^{2*}$
$11^2+60^2=61^2$	$21^2+220^2=221^{2*}$	
$12^2+ 5^2=13^{2*}$	$22^2+120^2=122^2$	

* *Additional.*—$9^2+12^2=15^2$. $12^2+16^2=20^2$; $12^2+9^2=15^2$. $15^2+36^2=39^2$; $15^2+20^2=25^2$. $18^2+80^2=82^2$. [NOTE.—Having exhausted his supply of the figure ^{2}, the printer has substituted the letter ^{b} therefor in what follows.] $20^b+15^b=25^b$. $21^b+72^b=75^b$. $24^b+32^b=40^b$; $24^b+18^b=30^b$; $24^b+7^b=25^b$. $25^b+60^b=65^b$. $27^b+120^b=123^b$. $28^b+21^b=35^b$. $30^b+72^b=78^b$; $30^b+224^b=226^b$.

ULYSSES.

EDITOR'S TABLE.

EDITOR'S CHAIR.

A Good Move — Pennsylvania Convention of Teachers.— We observe in the *Pennsylvania School Journal* for January the proceedings of a State Convention of Teachers of a somewhat novel character, but which must exert a great influence upon the cause of education throughout the state. In pursuance of a call made by the State Superintendent, Mr. Burrowes, there assembled in Harrisburg, during the holidays, a convention representing, not the common schools alone, but all the educational institutions of the state — colleges, seminaries, common schools, select schools, and academies.

The object of the convention was to harmonize these influences, which are too often erroneously supposed to be hostile to each other, and to consult how all might work together, each in its proper department, so as to push forward most successfully the work of general education. We can not but believe good results will be the consequence of this movement. A.

An Educational Pilgrimage.— Under this caption the editor of the *New-York Teacher* gives his readers a brief but interesting account of a visit made by himself, in company with a large number of educators from various states, on the invitation of the Board of Education of Oswego, N.Y., to examine and report upon the Pestalozzian system of instruction, as lately introduced into the primary schools of that city.

The examination continued three days, and gave the highest satisfaction to the Committee as to the merits of this system.

Miss Jones, an English lady, who was invited from London to Oswego to introduce this system of instruction into the schools of that city, and who has had an experience of fifteen years in training teachers, has, during the past year, conducted a training-school for primary teachers in this system with such success that her pupils are in great demand, and receive large salaries. Miss Jones will remain in this country but one year longer, but while here will continue in charge of this school. Those desiring information should address E. A. Sheldon, Secretary of the Board of Education, Oswego, N.Y. A.

Prof. Larned.— On the evening of February 3d the body of a man, lying upon the ground and partially covered with snow, was discovered in the suburbs of New Haven, Ct. It was found to be the not-yet lifeless body of Wm. A. Larned, Prof. of Rhetoric and English Literature in Yale College, with which institution he has been connected for 20 years. It was found that while taking his customary daily walk, regardless of the storm and of recent disease in the head, he had fallen in a fit of apoplexy. He died that evening, aged 54 years. †.

Maine State Report.—We have received the Annual Report of the Superintendent of Common Schools of the State of Maine, and find in it many good things, some of which we shall lay before our readers at an early day. A.

Ohio State Report.— We thank the State Superintendent of Ohio for a copy of his valuable Report. A.

Situation Wanted.— A gentleman who is a graduate of an Eastern college, and who can present the best of testimonials as to ability and character, desires a situation in a Union-Graded school. Address Editor *Teacher*. A.

New Advertisements.— The readers of the *Teacher* will find in our advertising sheet this month a new page from A. S. Barnes & Burr, and an announcement from Charles Scribner of a new series of Wall Maps by Prof. Guyot, shortly to be published; and on the cover a page from J. B. Lippincott & Co., containing testimonials in favor of Allen's Primary Geography, first advertised in the *Teacher* last month.

LOCAL INTELLIGENCE.

Chicago.— The annual examination of the Grammar Departments of the Chicago Schools took place on Thursday, 27th ult. The 2d, 3d and 4th grades were examined, and the assigned studies were Arithmetic, Oral Instruction, and Geography. The papers on these subjects were, however, made to test the pupils' orthography, use of capitals, punctuation, penmanship, and use of language. B.

Bureau County.— An institute was held at Lamoille, Bureau county, Saturday, Feb. 22, in the afternoon. The exercises consisted of drills in Reading and Grammar, as well as some discussion of modes of primary instruction. J. H. Blodgett, A.M., of Amboy, conducted the exercises. Some thirty teachers were present, which is a large number for an institute intended only as a local one. The upper room of the school-house was well filled by these teachers and the friends of education. Mr. Blodgett lectured in the evening at the Baptist Church.

Mr. L. D. White has charge of the school at Lamoille village. We hear the school favorably spoken of: we trust that it is deservedly so, and will continue so to be. S. T.

Stark County.— We are pleased to learn that Mr. N. F. Atkins, the Commissioner of Stark county, is busy at work. Mr. Atkins publishes accounts of his school visitations and examinations, as well as his views and suggestions on educational topics, in the *Stark County Union*. We commend highly to all commissioners the use of their county press in this manner: the people need to know what is being done. A.

NOTES AND QUERIES.

Answers.— *Query* 1 (p. 133). "How should we dispose of *to* in such expressions as *to-day*, *to-morrow*, *to-night*, etc.?" *Answer*. There are no other instances in the language in common use that are like the three given. In Northamptonshire and other parts of England *to-year* is used, equivalent to *this year;* and in Lincolnshire *to-month* is used; but these are counted provincialisms only. *To-do* and *to-full* as given in Worcester's Quarto are not precisely analogous, though a full examination of the word *to* would require an explanation of them also, and my present reply will fit them as well as some archaisms to be met with by a student of old English. Dispose of the *to* by considering it a part of the words *today*, *tonight*, etc., just as you dispose of *by* in *byways*, *over* in *oversight*, *under* in *undermost*, or *up* in *upland*. The two elements *to* and *day* have so coalesced that they now form but one word as truly as the parts in the words *byway*, *oversight*, *undermost*, and *upland*. Thus I answer the question how to *dispose of* the *to:* if the question had related to its original meaning, history, and relation to the following term, I could not have answered so briefly or so easily. Westman.

Query 2 (p. 133). "What is the derivation of the word *kerosene?*" *Answer.* From the Greek κηρος (*kēros*), wax, with the common chemical termination *ene.* Kerosene is not the name of a regular compound, but of a commercial article resulting from the destructive distillation of coal, which is composed of several volatile hydro-carbons not yet separated and analyzed. The name was given because of the resemblance of its flame to the clear light of a wax candle. E. E.

In reply to Query 2 in the last *Teacher*, I would suggest that the word kerosene is from the Greek κηρος, meaning wax. The Greek κηρωμα (Lat. *cerōma*) is an oil made of wax, a lubricating oil; and I take kerosene to be from this root κηρος, with the simple adjective termination *ene* (*ine* or *inus*). K.

'C.' suggests that it may come from χερας, *a pile of rocks*, and γενεσθαι, *to be produced*, whence kerosene, 'rock-produced'. The full form of the word would in that case be *cherasgene*, and contracted as *camphene* from *camphogene*, we should have *cherasene*. Changing the smooth mute *k* for the aspirate *ch*, we have *kerasene* or *kerosene*.

'N.' corrects F. F.'s statement that this word is not found in any of the dictionaries. It is in the Appendix to Webster's Pictorial Unabridged, although the derivation is not given. B.

NOTICES OF BOOKS, ETC.

PRIMARY MORAL LESSONS FOR SCHOOLS AND FAMILIES. Part First. By M. F. Cowdery, Superintendent of Public Schools, Sandusky, Ohio. Published at Sandusky.

We have taught moral lessons in our schools for many years, much of the time using Mr. Cowdery's book. We speak from experience, then, when we speak approvingly of Mr. Cowdery's works. We agree with the author that "every day is lost in the life-work of the teacher, and worse than lost, to the child that does not witness some form of direct appeals to a sense of duty. It should be borne in mind by those who hesitate to take a few moments each day for moral instruction, regarding the time so spent as lost to the quickening of the intellect, that there are no subjects that mature the mind of the child so certainly and so healthfully as those of a moral nature."

The author in these remarks by no means overrates the importance of 'moral lessons' as a part of school training and study; and, as Mr. Cowdery has, to some extent, made this subject a specialty, we advise all to avail themselves of his experience as embodied in his works. A.

MISTAKES OF EDUCATED MEN. By John S. Hart, LL.D., Editor of the *Sunday-School Times*, and late Principal of the Philadelphia High School. 12mo., muslin, gilt. Price 50 cents; paper covers, 25 cents. Published by J. C. Garrigues, 148 South-Fourth street, Philadelphia.

This little volume, which we have read with much pleasure, consists of an address delivered by Dr. Hart before the Phrenokosmian Society of Pennsylvania College. The topics of his address are — care of health; the habit of being beforehand in whatever you undertake; stick to your purpose; have some fresh intellectual acquisition always on hand; avoid limiting your studies to your own specialty; cultivate the art of conversation; duty of cultivating good manners; patriotism. Although not addressed to teachers, there is much in this production that will repay them in interest and profit for their outlay of money and time in its purchase and perusal. A.

NORTHEND'S DICTATION AND PRONUNCIATION EXERCISES. By Charles Northend. New York: A. S. Barnes & Burr. Chicago: Geo. Sherwood.

After a long use of Northend's Dictation Exercises in the school-room, we speak from experience when we add ours to the many testimonials of prominent and

successful teachers to its merits. To teach spelling, and render it an interesting exercise, requires much skill and ability on the part of the teacher. Spelling long columns of words from the spelling-book, as was the exclusive custom in our school-days, was always a tiresome and almost useless exercise. In pleasing contrast with the routine of those days we notice the many methods suggested by this book to give variety and interest to this usually dull study. We advise any of our readers who have not used the 'dictation exercises' to procure at once a copy for examination. A.

TEACHERS' INSTITUTES. By Samuel P. Bates, Deputy Sup't of Common Schools of Pennsylvania. New York: Barnes & Burr.

Mr. Bates, who is already known to most of our readers as the author of Institute Lectures, has in this excellent little book given to teachers his views and plans as to the object of institutes, their organization, and method of conducting them, as derived from his extended experience in this department of the educational field. An essay on the Theory of Education is also included in the volume.

We have read this little book with much interest, and believe that much good may be accomplished by its general circulation among our teachers. Much of the time of our institutes is frittered away, partly from ignorance of its design and the consideration of irrelevant topics; partly from want of knowledge how to go to work, how to set the machine in motion, and accomplish the most in the least time. To obviate these difficulties, and increase the efficiency of our institutes, this work was written; and although we do not agree entirely with all the author says, yet we conceive the work will accomplish much good, and is deserving a wide circulation. Every teacher should possess a copy of this book, and it should be a *vade mecum* of every conductor of institutes. A.

DAY-SCHOOL BELL.

We received from the publisher, Horace Waters, a copy of the *Day-School Bell*. It was submitted to the Editor's 'better-half', and has undergone a very thorough examination at her hands. She commends it very highly, as being an admirable singing-book, just adapted to supply the place for which it was intended, the 'day school'. See advertisement. A.

YOUNG BEN FRANKLIN; or, *The Right Road through Life*. A boy's book on a boy's own subject. By Henry Mayhew. New York: Harper & Brothers. Chicago: Griggs & Co. Price 75 cents. pp. 562.

We remember with what delight we read, when a boy, *Robinson Crusoe*, the *Swiss Family Robinson*, *Masterman Ready*, and three or four more books of the same sort we could name. Two or three times a year, at least, we went over them, and they were always as interesting as at first. We have not seen any such books for boys since we grew to be a man, neither have the boys, if we may believe those to whom we have spoken of late about the matter.

We thought, however, as we read the title of this book, that we had found one, and after we had turned one hundred and fifty pages we had not changed our mind. But from that on the author, in his desire to present his ideas of the sources of the intellectual and other pleasures of our nature, has entirely lost sight of the fact that he is writing a boy's book. Considered as an effort to impart sound instruction in mental philosophy, the book is a failure. The sugar-coating is too thin, and the pill shows through; and not one boy in a hundred will wade through it. Then, too, the criticisms on English literature are very interesting, and would do credit to an advanced work on English composition; but to think of discoursing learnedly about such matters to a boy of twelve or less is simply nonsense. The author is guilty of several anachronisms, and his knowledge of geography seems to be somewhat as extensive as that of the English editor who speaks of the landing of Burnside's Expedition *on the west coast of Virginia!*

Young Ben and his uncle make the journey from Boston to Annapolis in a sloop; thence to *Pittsburg* (?) by *stage* (?); and, descending the Ohio in an ark, *arrive at St. Louis* in three weeks from the time they started. Setting out from St.

Louis one morning to view the prairies, they meet a beggar on the road who asks them for *quarter-of-a-dollar* (A.D. 1727, or thereabouts), and arrive by noon, and eat their luncheon, where they can hear 'the faint murmur of the distant Illinois River droning through the air like the dying hum of a cathedral bell'. As the distance is in the neighborhood of forty-five or fifty miles, we think they got over the ground that morning at a pretty fair speed. We suppose, too, as they did not cross the Missouri, they evaded it by going around its head waters; and wonder much in what particular section they found the prairies 'dotted with trees'; here a tulip-, there a cotton-, yonder a cherry-tree; and, besides these, 'oaks and chestnuts, sycamores and black-walnuts, cypresses, and cucumber-trees, and locust-trees, some times growing singly, some times in circular clumps'.

We are sorry so good a book should be thus marred. B.

Analytic Elocution. By J. C. Zachos. New York: Barnes & Burr. Chicago: Geo. Sherwood.

Mr. Zachos has given here a work which more nearly conforms to our idea of what such a work should be than any we have ever before seen. It was written to supply a want which all teachers have felt. We too often teach elocution as a simple exercise in imitation. We have been compelled to do so, to a certain extent, because of the lack of a suitable class text-book from which to give regular lessons discussing and illustrating the properties of the voice in speaking.

We need have this excuse no longer. So thoroughly is the subject discussed, and in such simple language withal, that he must indeed be a dull pupil who is unable to understand it.

Used in connection with Parker and Watson's Fifth Reader, or any other book possessing its characteristics, in the hands of a competent teacher, this book ought to make our scholars better and more intelligent readers and speakers. B.

Wells's First Principles of Geology. A Text-Book for Schools, Academies, and Colleges. By David A. Wells, A.M. New York: Ivison, Phinney & Co. Chicago: S. C. Griggs & Co. pp. 333. 75 cents.

Text-books on the sciences are too often so dull and uninteresting as to be repulsive. Particularly is this the case with Chemistry and Geology. Mr. Wells has the happy faculty of being able to communicate knowledge so as to make it entertaining. This is the distinctive feature of all his text-books, and to this is due, to a considerable extent, their great reputation. We remember his Natural Philosophy as the most successful of our teaching, and a little girl of our acquaintance was glad to have the privilege of reading by the hour our copy of his Chemistry.

We have in the Geology another work possessing all the characteristics of those just mentioned, and one destined, we think, to be as successful as they. We do not wish to be understood as intimating that there is any thing of writing the subject down to the comprehension of the child — chewing the food, as it has been called,— against the folly of which Sir Walter Scott so well spoke: for Mr. Wells does nothing of the kind. Avoiding that exclusive use of technical terms which render some learned text-books so dry and wearisome, he has, without sacrificing scientific exactness or completeness, given us a work better adapted to the limited time devoted to this subject in the majority of high schools and academies than any we have ever seen. B.

Leisure Hours in Town. By A. K. H. Boyd. Boston: Ticknor & Fields. 1862. $1.25. For sale by S. C. Griggs & Co., Chicago.

We have here, uniform with the *Recreations*, a republication of fourteen of the later essays of 'The Country Parson'. These essays are not, we think, equal to the earlier ones, although *Concerning Veal*, contained in this volume, is one of the best he has ever written. We can not help thinking, however, that the *Parson* has, as he grew famous, written with less care and more for pay. His essays show traces of a hand hurried by the printer's call for 'copy' in more than one particular, not the least important of which is the lack of the careful pruning

which prevented the frequent repetitions and long-drawn sentences found in his later ones. His last-published essay, 'Concerning the Sorrows of Childhood', is hardly recognizable as written by the same hand that wrote the *Recreations*, and would never have been allowed to appear there.

This volume is embellished with an engraving of the author. B.

ROBINSON'S SERIES OF MATHEMATICS. Chicago: S. C. Griggs & Co.

[*Continued from our last number.*]

We find the *Algebras* characterized by clear and concise operations and analyses of the rules and principles, the great number of examples, and their adaptation to the several subjects. We fancy, we hardly know why, that the author considers the *Elementary* the most successful work of the two.

The distinguishing features of the *New Geometry and Trigonometry*, as we see them, are: throughout the work are full collections of carefully-selected problems of a practical nature, which can not fail to excite the powers of the student and test his proficiency in a manner nothing else can; and Spherical Geometry is placed as an introduction to Spherical Trigonometry, thus enabling the student, by having the propositions of the former fresh in his mind when he begins the latter, to master it with comparatively little difficulty.

The *Treatise on Surveying and Navigation* has too modest a title. It is an application of the Mathematical Sciences to Mensuration, to Land-Surveying, to Leveling, and to Navigation. It is both theoretical and practical.

The Conic Sections and Analytical Geometry is the best work of the series. The definitions are clear and concise, and the demonstrations faultless. He who fails to comprehend them must be dull indeed. Here, as in the other books of which we have spoken, we find numerous practical examples, serving to forcibly illustrate and impress the principles. The work is just published, and, as is the case with all new works, there are a few errors in orthography; but these will not, of course, be found in subsequent editions.

There remain two works, the *Astronomies*. We feel our inability to speak of these works as we would like. The *University* edition is an exhaustive treatise on the subject, and the *Elementary* was prepared because the other was, in consequence of its advanced character, unadapted to the great mass of pupils.

We have thus noticed, somewhat briefly, this series of Mathematics. The books are of great worth and high merit. They are being introduced into the leading schools all over the country, and we think the author is fully justified in claiming it as the most extensive, complete, practical and scientific Mathematical Series published in this country. B.

SANDERS'S UNION SERIES OF READERS. Numbers *One* and *Two*. Chicago: S. C. Griggs & Co.

In our larger schools, where scholars attend regularly the entire year, they tire of any of the earlier books of a series before they are prepared to enter the one next higher. To meet the demand for a book of the same grade or a little in advance, this series of readers has been prepared. Number *one* is designed to follow the author's Pictorial Primer and precede the First Reader; while number *two* is intermediate between the first and second books of the old series.

We think these books are more closely graded than the corresponding works of the common series, and the selections better and more interesting. Schools now using the common series will, we have no doubt, be glad to get the relief from the *learned-by-heart* lessons these books are intended to afford.

We are sorry to see, however, that the author, in his explanation of the pauses, gives the old directions to pause the time of counting *six*, *four*, *two*, and *one*, at the period, colon, semicolon, and comma; and gives specific directions to 'let the voice fall' at the period, colon, and semicolon, and 'rise' at the comma; adding, however, in regard to the semicolon, *Some times the voice should rise, as the sense may require* (?). No one teaches so, and we are surprised to see these absurd directions for inflections revived and introduced where they can not fail of doing much harm. B.

GRAY'S BOTANICAL SERIES.—

I. How Plants Grow (500 engravings)	$ 75
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AGRICULTURAL JOURNAL.

It is with pleasure we notice the receipt of the first number of the *Journal of the Illinois State Agricultural Society*. This journal, the organ of the Agricultural Society of the State, is issued semi-monthly, at Springfield, under the editorship of John P. Reynolds, Corresponding Secretary of the Society. It is devoted to the advancement of the interests of Agriculture, Mechanics, Household Arts, and Natural History. The subscription price is fixed at the low rate of 50 cents, the object being merely to cover the cost of publication.

We commend this journal to all our readers, but especially to those in the rural districts, and hope it will receive the support that such an enterprise merits. In addition to other valuable matter, the first number contains the following original contributions: 'The Grain Weevil', by Benj. D. Walsh; the first of a series of articles on 'Our Natural Resources', by C. D. Wilber, the well-known Geologist; 'Orchards in Illinois', by J. T. Little, of Dixon. A.

THE NORTHWESTERN CHRISTIAN ADVOCATE ($1.50 per annum), published by Poe & Hitchcock, Chicago, for the M. E. Church, and edited by Rev. T. M. Eddy, is one of the best weeklies with which we are acquainted. Containing nothing objectionable to any denomination, it embraces in its eight pages so many able articles on such a variety of subjects — religious, political, educational, agricultural, etc., as to make it a welcome visitor to any family, and particularly to those of the denomination it represents. B.

HARPER'S MAGAZINE.

We have received the April number of this magazine. The leading articles are: 'Pambookat', a fairy tale of the Malays; 'Caricature and Caricaturists'; 'The Building of the Ship'; 'Shay's Rebellion'; 'The Contest in America', from *Fraser's Magazine*; and a continuation of 'Philip', 'Orley Farm', and Miss Muloch's new story, 'Mistress and Maid'.

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ILLINOIS TEACHER.

VOLUME VIII. MAY, 1862. NUMBER 5.

HOBBIES IN SCHOOL.

THERE are few persons who have not some hobby which they delight to ride. In this highly-favored land of free speech and free press, of schools, and books, and newspapers,—where men must from sheer necessity hear and talk, even if they do n't read,—it is not to be wondered at that hobbies in the state, in the church, in the community and in the family abound; and that some times they are ridden out, and made to show their paces before the public, is but a natural consequence.

Hobbies, although of near relation to 'isms', and 'fevers', and 'ologies' of various kinds, are not, as many would have us suppose, without their good points: indeed, we intend to maintain the position that the man who has no hobby on which to take exercise is not only unacquainted with one of the most exhilarating pleasures, but also deprives himself of a stimulus necessary to strength and activity. The man must certainly be hibernating who, retired within his own little domain of business and routine of daily care, is contented, and entertains no plans by which the community, the state, the church, or the world, may be rescued from its condition of spiritual, mental and moral darkness, or physical imbecility, if given to his care; and when the season of his hibernation is over, and spring awakens him from his torpor, he will find, like another animal, that sustenance derived from sucking one's own paws is but poor living, and will come forth from his winter-quarters with much loss of flesh.

The depths of our compassion are stirred within us when we contemplate the miserable condition of one of your cautious, unsympathetic mortals, who is too wise, too prudent, and too devoid of enthusiasm, to

maintain a hobby, and who looks upon one who does as indulging in a foolish expense. How little he knows what exquisite pleasure and satisfaction he loses!

'Hobbies', 'isms', 'fevers', and 'reforms', have been the terms by which, at first, have been characterized most of the proudest advances in modern civilization. As the best poems are most parodied, so the 'ideas' most hobbyized and perverted are generally the most valuable.

It is not at all strange, when a person finds himself in possession of what he considers a valuable idea, that he should, in his enthusiasm, overestimate its value, and, in popular phrase, 'run it into the ground'. But, certainly, because the discoverer may exaggerate its value, and make it a hobby, this by no means proves it is without value.

The profession of teaching has, like all professions and institutions, experienced the introduction of new methods, which, like a contagious fever, passed into the system of teaching from one end of our country to the other,—adopted because they were new and striking and fashionable, and not because of their merit, however meritorious they may have been. Though failure has often been the result of this unwise enthusiasm, still the failure was due not to want of merit in the method, but to ignorance or want of tact in him who would put it in operation.

The Lancasterian system of school instruction, in the hands of Joseph Lancaster, was undoubtedly a most successful method of teaching: so it was regarded in its day, and, being so regarded, was adopted generally by the schools of that time. But experience made evident that all persons are not able to comprehend the excellence of a system, however good, and still less put it into practice; and now the Lancasterian schools are looked upon as one of the hobbies of the times in which that system flourished.

The system of to-day, which demands and obtains universal approbation, is the Union Graded system. To say that it will meet the fate of the Lancasterian system is, we know, an unpardonable disloyalty, in the eyes of the people, to the cause of popular education. Do n't every body agree that the Union Graded School is the ne plus ultra of educational systems? Is not this system universally popular? Is it not every where producing the most satisfactory results? All these questions, if asked a few years since in regard to the Lancasterian system, would have been answered in the affirmative; and yet, where is to be found a Lancasterian school. Now, although we believe the Union Graded system is incomparably superior to any that has preceded it, yet we know that often in our towns and cities what is called a Union Graded school is but an imitation of the most striking external features of the system, while all that gives it excellence and

vitality is omitted. The name is accepted for the thing; and results are attributed to it which are entirely in imagination.

What enlightened teacher would fail to have the blackboard in his school? Why, the man who has not every available space in the school-room occupied by blackboard must certainly be benighted; for do n't our best educators recommend it highly as almost indispensable? Certainly they do; and we will have them supplied forthwith; all good schools have them: and forthwith the boards are procured. A visit to the school within a short time reveals to us that the boards were, to all appearances, procured to afford the scholars abundant opportunity to write their own names and those of others, while the recitation in arithmetic is conducted on slates. So the blackboard may be pronounced a hobby — a useless appendage to a school-room. So the dictionary in school, the school-library, and innumerable appliances and methods in school discipline, studies, or arrangements, have been hastily and unadvisedly introduced into the school-room long before there was the least demand for them, and have therefore, to a considerable extent, involved a useless expense.

The hobby which is now being ridden at a most unmerciful speed is 'Object-Lessons'. What! you are certainly not opposed to instruction by object-lessons! Do n't all our eminent educators approve highly of this method of instruction, and advocate its introduction into the common schools? Is it not the natural method of primary instruction? Yes! yes! that is all true: we grant it all, but would simply suggest that when we have secured for our common schools teachers who have so extensive a range of acquirements as to be able so to converse with their scholars as to give them any *really valuable knowledge* on the subjects a feather, a piece of chalk, a leaf, a lead-pencil, etc. etc., and give any *real training*, their services will be worth more than $20.00 per month. The acquirements necessary to teach object-lessons are possessed but by a minority, perhaps a small minority, of our teachers. The subjects given in the books on this method of teaching require more than a smattering of Geometry, Geology, Botany, Natural Philosophy, Physiology, and other branches of Natural Science. The mere asking of common-place questions, inducing no thought on the part of the child, and conferring neither knowledge nor training, will be the inevitable result of the indiscriminate introduction of object-lessons into our schools. When the time arrives that object-lessons will have run their race as a hobby, and the sentiment prevails that it is not a successful means of instruction, we hope to use our pen and voice in defense of this most valuable of all modern improvements in instruction, and maintain that the hobby really had bottom, but was ridden too hard.

A.

COMPOSITION-WRITING.—Number III.

In the last article we discussed one method of presenting the mysteries of essay-making to beginners, viz., the teacher himself going to the board and sketching the rough outline of one: it was shown, also, that if he make apparently bungling work of it by perpetrating all sorts of errors in orthography, rhetoric, and punctuation, the scholars will take great delight in correcting them and learn to guard against similar ones themselves, besides finding no small merriment in the operation.

We shall now give another plan. It is Friday, and the small grammar-class has taken its seat in recitation. Here let us digress a moment: we have always deemed it best to notify scholars in regard to compositions on Friday, because they have thus the leisure of two nights and a day to prepare an advantage which would be lost were the exercise required in the midst of the week, engrossed as it is with the ordinary studies: again, we speak of the small grammar-class coming up, as we teach composition by classes, as we do any other lesson, even where the instruction is altogether oral, younger pupils demanding a drill unsuited to the larger.

"Scholars, to-day I will write a composition on *Canal-Boats*. Before I begin, however, I will make out a list of the different things to be said about them. Here I will put them on one side of the board in order one under the other. For instance, we have—1. What made of; 2. Shape; 3. How made to go; 4. Speed; 5. Uses; 6. Danger. By thus forming a skeleton, as it is called, of the different ideas, you will know exactly what to speak about and avoid getting the same thing twice." I then dash off the following on

Canal-Boats.— Canal-boats are made of wood and iron. They are shaped much like a steamboat, except that they have no wheels. Horses or mules pull them along by means of a rope fastened to the bow of the vessel. They sail in what are called canals, which are large ditches filled with water. Their greatest speed is about as fast as a horse can trot. Before railroads were made people traveled on the canals; but now they are chiefly used for carrying freight. Many people still like to go on them, because there is no danger of their bursting the boiler or running off the track.

The teacher should not execute this specimen effort without stopping several times, but should pause at such points as may afford favorable

texts to hinge short lectures on. For instance: after inditing the first sentence above, I stand in that thoughtful, hesitating attitude so common to careful preparation. The scholars stare. Is it possible that the master 's nonplussed? Wonderful! But here 's a splendid chance to point a moral. "Scholars, I know well enough what to say, but I was just thinking of the best language in which to say it. I wish you would all be particular not to write the first words that come into your minds, but try to study out the best. Many of the finest writers that ever lived composed very slowly; so I do n't wish you to get out of heart if you must stop and think when you are writing." In a similar manner, if the teacher finds himself about to employ a word already used too often, he may turn to the little class, mention the dilemma, caution them against a like impropriety, and appeal to their knowledge of synonyms for a ready substitute in the present case.

"Well, for the next time our subject shall be some way of traveling. Let us see,— how many different kinds can we get?" Juvenile brains are soon busy; and as impatient voices utter one variety of locomotion after another, I transfer them to the board. Here they are: Horseback, stage, cars, omnibus, balloon, steamboat, ship, carriage, walking. I intend to assign one of these to each member of the class, without respect to individual preference, when Nancy says she wants 'horseback', and, by a singular coïncidence, each of the others selects his or her theme, *nemine dissentiente*.

"Now, be sure and first make a skeleton of your ideas, and then write carefully and neatly."

It will be seen from what I have said that it is better for the teacher in writing his model on the board to take for his theme one of a kind, so that the learners may take its relatives, which they can thus subject to a similar treatment. To speak botanically, one member of a *genus* should be taken by the teacher, while the remaining *species* would serve for the pupils. W. W. D.

STERLING, Ill., March, 1862.

LANGUAGE VERSUS ARITHMETIC.

ONE of the most important topics to be considered in connection with our public schools is the relative amount of time properly devoted to different branches of study. I believe that the prevailing practice in this regard is in some points very erroneous. Certain studies occu-

py the time and attention of teachers and pupils to an extent quite beyond their intrinsic value, and to the damage and exclusion of other branches. Let us bear in mind at the outset that every thing can not be studied in the common school. The time and the capacities of the children are limited. But the branches which are studied should be those of the greatest value to our children when they shall enter upon the duties of life. Bear in mind, again, that the value of any study consists in two things: first, the information which is derived from it suited to the wants of practical life; and, second, that discipline of the mental powers by which a man is enabled to acquire other knowledge, to remember and classify facts, to apprehend the relations of things, to reason clearly and to act promptly in all the business of life. Some studies contribute more to our practical knowledge, others to our mental discipline; nearly all studies, of course, add something to both. Now, the question for us to consider is whether the ordinary studies of the public school, as commonly pursued, are adapted to secure these two objects in the best proportions.

Let us compare, first, the study of language and the study of numbers, as found in the schools. Every child learns something of reading and spelling. Most of the girls learn something of grammar; and a smaller number of the boys learn less of it, theoretical or practical. To composition, the most effectual means of learning the language, very little attention is given by either. Arithmetic, on the other hand, engrosses the attention of all, from the beginning of the course, at six or eight years, to the end of it. In a great majority of the schools it is only written arithmetic; arithmetic by rule and by rote. The high ambition of each seems to be to 'do the sums'; to 'cipher through', first the 'Common-School' and then the 'National'; and no young man thinks his arithmetical character fully established until he can 'get the answers' to all father Greenleaf's questions, practical and unpractical, arithmetical, geometrical, algebraic, and nondescript. It is just to say that a vast improvement has been made within a few years in the manner of teaching arithmetic. More of the *science* of numbers is learned along with the art; and, as a consequence, more of both knowledge and discipline is derived from the study. Still, it is true that a great part of the time spent over the slate and arithmetic contributes to neither so much as it ought. More of mental arithmetic should be insisted upon, with reference both to training the powers of memory and analysis and to the practical uses of arithmetic in every-day business. And written arithmetic might well be confined, in ordinary cases, to a thorough explanation of its principles and a sufficient number of examples for illustration. Arithmetic thus studied would contribute its

fair proportion to the two purposes named above. It is doubted whether the mere intellectual puzzles, the extraneous and super-arithmetical matter contained in some of our text-books, are of much worth in promoting healthful and symmetrical discipline, while as an addition to our practical knowledge they are of none at all.

But allowing that this long dwelling upon arithmetical difficulties may add something of intellectual sharpness to our Yankee boys, would it not add much more to their respectability as scholars and their usefulness as citizens to spend a portion of the time thus devoted in learning to read and spell and speak their mother tongue with more propriety? I claim that the thorough and careful study of language may impart as *much* of mental discipline as the study of arithmetic; and if there is a difference in the kind of training secured by the two, it is not in favor of the latter. But when we consider the value of the two as means of practical usefulness and personal accomplishment, it falls far below that of language.

To read well is an elegant art, rarely attained by our young people. How few of them can take up an evening journal and read the news of the day, especially from the telegraphic column, intelligently and without hesitation. This would not be so if half the time consumed upon the less useful portions of arithmetic were given to the *study* of reading — newspaper reading with the rest, — with dictionary and gazetteer in hand. Then, again, how few of our children on finishing their course at school can express themselves with grammatical propriety in ordinary conversation; and how few of our young men can present their opinions in an address or a public debate with fitness and force, simply because they have not learned the ready and accurate use of their mother tongue. Still again, if called upon to communicate their thoughts on any subject through the press, or to draw up a business document or a series of resolutions, or to indite an important epistle, to what 'lame and impotent conclusions' do they suddenly come, to their utter confusion. And this want of early training in the grammar and composition of the language is felt in after life much more seriously than any want of skill in solving arithmetical enigmas. I hope not to be misunderstood. Arithmetic is one of the most valuable and beautiful studies; beautiful in its place and season, but not when it overshadows and dwarfs all other branches of the tree of knowledge. Our conclusion, then, seems a very safe one, that, as compared with reading, spelling, and grammar, arithmetic has received too large a share of attention in the common schools.

Hon. E. P. Weston, Maine State Supt.

MILITARY DRILL.*

It has of late become quite fashionable to recommend the introduction of military drill into the common schools of the country, and a writer in one of the New-York papers goes so far as to recommend that boards of education should even furnish the schools with muskets to be used in their drill-exercises.

There are several military movements which are well suited to aid in developing the physical system, such as marching, counter-marching, facing, dressing, etc. These I should be glad to see added to the course we have already adopted; but most of the special training of the soldier is exceedingly deficient in the essential requisites of a complete and satisfactory system of physical culture.†

The introduction of muskets, or any substitute for them, into our grammar schools I should regard as one of the most alarming evils that could possibly befall them.

It is the appropriate business of our public schools to train up patriots and not soldiers. I would have the pupils study carefully the history of our government and learn what treasures of blood it cost to establish it. I would have them taught that love of country is one of the first and most important lessons of life. I would have them sing often, and with the spirit and understanding, such pieces as 'The Star-Spangled Banner' and 'Hail Columbia'. I would have them feel that when the government of the country is in peril no personal sacrifice to save it can be too great. All these are appropriate lessons for children at any age. But I should regard it as a fearful calamity to have either the spirit or the forms of war brought within the walls of the school-room — walls hallowed to lessons of kindness, forgiveness, and love. Let the great aim of the public schools be to train communities of children to dwell together in after life in peace and harmony. If three or five in a hundred must ultimately devote themselves to the arts of war, let them *at the proper age* be trained by themselves; but let not the other ninety-five, and especially those of the gentler sex,

* From the Report of W. H. Wells, Esq., Superintendent of Public Schools, Chicago, for the year 1861.

† "Need I say that the military drill fails to bring into varied and vigorous play the chest and shoulders? Indeed, in almost the entire drill, are not these parts held immovably in one constrained position? In all but the cultivation of uprightness the military drill is singularly deficient in the requisites of a system of muscle-training adapted to a weak-chested people." Dio Lewis, M.D.

be surrounded by the associations of war and bloodshed during all the period of their education at school.

If the young men in our High Schools are disposed to form *volunteer companies* and drill with wooden wands on the school-grounds, out of school-hours, very few objections can be raised to the practice, and, in times like the present, it may be desirable to encourage the formation of such companies. More than this would be a baleful perversion of the public-school system.

MORE ABOUT 'KEYS'.

I AM glad that my article on this topic in the February *Teacher* has called forth one communication, and that from a gentleman who is at once an author and a teacher.

I was perfectly aware of the pressure that is brought to bear upon authors and publishers in this matter; and of course I have no word of blame for the former when he prepares or for the latter when he publishes a key; for the object of each is *to make money*, and to do this he must cater to the dominant taste, however vicious. His statement that he has never, in his own teaching, 'seen any evil resulting from the use of mathematical text-books with the answers' is worth something, as the experience of a teacher of long practice and eminent success. But, if I may place experience against experience, I will say that, after more than ten years' teaching, in district schools, grammar schools, high schools, and normal schools, my candid and clear conviction is that I have seen from such use 'evil, only evil, and that continually'.

I do not mean to say that in no case are they, or *can they be*, used without evil, but the '*inevitable tendency*' is all wrong; and if they are in any case comparatively harmless, it is only by constant care and self-denial on the part of the pupil, accompanied by ceaseless vigilance on the part of the teacher. I can conceive that, if the answer were in no case consulted, or *even looked at*, until the pupil had fully reasoned out and carefully performed every step of his work, the key might be harmless; and more, I think that it might be of some advantage. In no other way can I see how the evil can be averted. Is this the way Mr. Henkle proceeds? If not, will he give us his method?

I consider this subject of so much importance that I hope the teachers of Illinois will think of it, talk of it, decide upon it, and write

about it: and if there are good reasons for the existing state of things, let us hear them and all be convinced; but if not, let us bring such a pressure to bear upon publishers who supply this market that they will be as ready to omit answers as they now are to insert them.

E. C. HEWETT.

Bloomington, March 29, 1862.

HAVE SOME FRESH INTELLECTUAL ACQUISITION ALWAYS IN HAND.

Some students, after getting fairly settled in their professions, merely work on from year to year with the materials of knowledge already acquired. Surely this is not wise. The case of the professional man is like that of the pioneer in a new settlement. When the fields already under cultivation are thoroughly subdued, the stumps removed, the ditches, drains and fences all in order, the pioneer does not then settle down composedly and consider his plantation as complete. It is to him only the signal to make another encroachment upon the virgin forest. He proceeds accordingly to bring a new field into cultivation. When the process with that field is complete, he begins with another. Thus he goes on, ever enlarging his domain, ever having under way at least one new movement in advance, until in time, one scarcely knows how or when, the poor hardy pioneer becomes the great landed proprietor. So should it be with the professional man. If he wants to make steady, healthful growth, he should always have by him some one new study; something in hand that he can turn to from day to day and give to it at least a few touches. It may be the acquisition of a new language, the mastering of some new branch of science, the preparation of a treatise or a book; only let it be something not already contained in the routine of his profession, something that will add to his intellectual domain, that will make him a larger proprietor. The danger with professional men is that of moving round and round in an unchanging circle. Clergymen, especially, are apt, after a few years, to fall into a certain stereotyped routine of thought, a rut which they deepen, perhaps, but they never get out of it. If you hear them for a year, you hear all they have to say. They do not literally (perhaps) turn the barrel over and give the same identical sermons; but they might as well do it. They have no new ideas. It is only a continued iteration of the same old thoughts in some new dress. The only remedy against a man's thus repeating himself is growth. He must be all the while steadily invading the virgin forests of the unknown.

While he cultivates diligently the fields already subdued, and duly fills his garner with the golden grain, he must all the while have at least one new wilderness tract under the process of being brought into cultivation. He must be always enlarging in some direction the bounds of his knowledge. Thus only can he keep his mind fresh. Thus only can he fulfill the Master's injunction to 'bring forth things new and old'.

You know the proverb about a finished city. A town that is really flourishing always shows signs of incompleteness. There are new houses or blocks of houses going up, old houses being torn down to be enlarged and modernized, and half-finished streets piled up with dirt and rubbish. Woe betide the place that is no where blocked up with brick and mortar. A town that is finished, that has actually stopped growing, is already in a state of decadence. We have too many finished men among us — men who have quietly ceased growing. It is a mistake. The man who ceases to go up has begun to go down. There is no being stationary in this matter. If you are not adding to your stock of knowledge you are losing. The medical man who merely goes on practicing on the knowledge and theory already acquired, who takes no medical journals, and does not keep himself abreast with the general progress of medical progress, is inevitably falling behindhand. So with every other profession. If a man gives himself entirely up to his practice; if he becomes a man of mere routine; if he ceases to be in some substantial measure a student, making all the while fresh acquisitions; if he allows himself for one moment to entertain the thought that his professional education is or ever can be complete; he is making a mistake. He already shows fatal symptoms of decadence.

The difficulty does not occur usually in the first stages of professional career. In those early years, when a man is just struggling into position, there is abundant leisure for study, and commonly there is a fair amount of good solid study. But when a man has made some decided progress in his profession, when clients become numerous, or patients multiply, or the congregation becomes large, and necessary duties increase, then is the danger; then comes the temptation to settle down into a fixed, comfortable routine. The man in full practice finds so much that he must do that he has rarely the courage to take up any thing not absolutely required by strict professional duty.

If men in such circumstances would fairly make the trial, they would find the difficulties much less than they suppose. What is recommended is, not to attempt any great amount of extra professional study,

but always to have some such extra professional study or work in hand, and to do a little at it every day. It is surprising how the thing will grow upon a man. The main difficulty is in making a beginning. And here my advice is to begin in a very humble, modest way. Do not sketch out for yourselves some vast, unwieldy, impracticable plan, but just take up any one thing and follow it out with steady perseverance. Pick up a grain or two every day and add to your heap. You will soon learn by happy experience the power of littles as applied to intellectual processes and gains.

Dr. JOHN S. HART, in 'Mistakes of Educated Men'.

ECONOMY IN SCHOOL EXPENSES.

In these days of secession and national trouble, when enormous war expenses are accumulating, there is a reasonable and natural desire and effort to economize in every proper direction. In some cases this retrenchment and saving may be carried too far; and there are points that we should watch carefully, to see that our best interests do not suffer or die from the cutting-off of their supplies. We should think it poor policy for a man who found he was losing property to attempt to economize by ceasing to eat, that he might save the price of food.

There are some who forget the want of the mind for food, and who treat the mind, in their plans of economy, as one would his body who to save money should deprive himself of necessary food. Even in old Massachusetts, which ranks so high in patriotism and mental culture, the schools have been cut down, to save money to meet the war appropriations of a number of towns. Our own state has felt the influence of the curtailment of provision for mental discipline.

Very many feel that this can all be remedied when the war is over, forgetting that mind does not stand still in growth or demand any more than the body does, and that the children growing up can not endure mental starvation any better than they can physical abstinence. Thus much we can and must do: all the fancy intellectual dishes—the candy and sweetmeats of education,—which have served to pamper vitiated taste and keep up style, must be discarded, and we must come down to simple, plain mental discipline, in such way as to make strong minds hearty and vigorous.

We need to take Daniel of old as an example rather more than we

have done. In bodily temperance, earnest faith, and hard study, he was a model youth; and when he grew to manhood he led even in worldly glory all the courtiers and fashion-followers of his time. The American people should be proud of Franklin, who by rigid temperance and studious habits reached so high an eminence at home and abroad. Franklin was in great degree self-educated; yet he obtained the rudiments of an education in a common school.

Our schools are the hope of the nation, in connection with instruction in the family and the church. If our schools are cut off, then indeed the rebellion will have done us a vital injury. Ignorance and vice will remain to be conquered when the armed enemies of our government are put down; and through this very cause, should the war be long continued, we might drift into monarchy. Economy—the cutting-off of every expense not calculated to aid in mental training, rigidly refusing to spend any thing for show,—is fit and proper; but we can not afford to retrench our schools out of existence. Some, in different parts of the country, are trying to hire cheap teachers, and will have *cheap schools*, even though they be so poorly conducted that the children leave them worse in habits and ideas than when they entered them. A poor school *is* worse than no school: we can not afford to have *no school*, and still less can we afford to have a *poor school*.

This is a matter in which every citizen has an interest and an influence. Some can visit the schools, and encourage the efforts of teachers and scholars: those who can not can at least see that their children are promptly and regularly sent to school, and that the great curses of our schools, irregularity and tardiness, are avoided. All can remember that habits formed at school will be reproduced at home, and that the habits formed at school will depend not a little on the notions brought from home. Respect for teacher, for each other, for their books, and for the school-house itself, is built up, or disrespect and defamings and defacings take its place, much as these matters are spoken of at home. The hours and weeks and months out of school, it must be remembered, have an influence, as well as the few hours spent in the school. No parent should send a child to a teacher whom he does not himself respect: if he does, he is sowing the wind to reap the whirlwind, in disrespect by the child of all older than himself, of his superiors and rulers when of equal age with them, and some times in crime and deep disgrace. Better that books should remain for ever sealed than be opened with only such consequences. But these things need not be if every one will make effort to secure in his own locality an economical, thorough, good school, under a conscientious, reliable teacher.

S. T.

IMPORTANCE OF THE DICTIONARY IN THE SCHOOL-ROOM.

BY REV. J. C. BRODFUEHRER, A. M.,
Principal of Warren Collegiate Institute, Warren, Illinois.

THE illustrious Hungarian exile, in the year 1837, while in prison for the political crime of loving Liberty too well, asked the jailers for a copy of Shakspeare, an English Grammar, and a Dictionary. By the aid of these three books Kossuth attained such a mastery of our language that by his eloquence he enchained the people both of Great Britain and the United States. They who had the good fortune to hear his strong sentences and heart-stirring appeals will see how much the Dictionary assisted him in fitly putting together the words, pregnant with thought. By many good judges of oratory he was esteemed equal to 'the old man eloquent', and took rank with Webster, Clay, Calhoun, of our land, and Lord Brougham of England.

What the Dictionary did for the brave Magyar chief it can do for every child in every school. Its importance in the school-room, therefore, can not be overestimated. Whether we view its general use as indispensable to a correct knowledge and use of language, or its relation to all the studies of the school—as Grammar, Arithmetic, Reading, Spelling, and Composition,—the subject possesses peculiar interest for every lover of the English language. Do we wish to transmit to the future inhabitants of this great continent pure words and expressive phrases, or vulgar and ambiguous ones? If the former, what better assistant can we find than a good dictionary?

It is a fact founded in the very nature of the laws of mind that just so far as our ideas are clearly defined in the intellect the words expressing these ideas will be clear and appropriate; it is equally true that *just so far as the exact meaning of our words is not fully understood by us our ideas can not be distinctly set forth.*

Language is the medium through which we communicate our thoughts. Now if the medium be as the turbid stream, how can we see the shining gold at the bottom, shine it never so brightly? So with the sparkling thoughts of a deep mind. If it has no crystal words with which to impart them to the hearers or readers, of what more avail are the thoughts hidden in confused phraseology than the precious metal hidden from our view by the muddy water? The jewel receives additional lustre from the pellucid water into which it is

dropped: so the thought receives additional clearness from the appropriate words in which it is clothed. Again, *words* are to the mind what clothes are to the body: they dress the man. As we can tell whether a person is neat or slovenly by his dress, so by his language we can tell whether he is an accurate or disorderly thinker. By ideas the world is ruled. It is evident, then, that we can do nothing better than to make the medium through which these ideas are expressed clear as the limpid stream.

It will now be granted, on every hand, that a good dictionary is requisite to a correct knowledge and use of language: we therefore proceed to consider its relation to the various studies of the school seriatim.

GRAMMAR.—So intimate is the union between the signification and use of a word, that if the former be accurately ascertained from the dictionary the latter will be easily determined for the grammar recitation. No one need ever expect to become a profound grammarian without being well versed in the definitions of the words to be parsed. Without this fundamental knowledge of words, the terms noun, adjective, verb, etc., with their subdivisions, will remain to the pupil an unsolved enigma.

ARITHMETIC.—Figures are used in all calculations, as words are in the expression of ideas. One (1) standing by itself is unity, on which the Science of Numbers, or Pure Mathematics, depends. But how greatly is its value changed by simply removing it one place to the left: it then becomes ten times one; if removed two places, it becomes a hundred times one; three places increases it a thousand fold. Words, likewise, have very different significations, depending upon the place they occupy in the sentence. With these thoroughly learned from the dictionary, the sentence in written or mental arithmetic will become luminous. The mind, being full of light as to the meaning of the sentence, will solve it in a manner intelligible to himself as well as to the rest of the class. When a 'hard problem' is clearly apprehended by the pupil, he thinks it over till all its relations stand clear and well defined before his mental vision and he can give a reason for every step in the operation. Then his eye sparkles with the delight of a conqueror; for he has really overcome an army of difficulties, which soon surrendered to his clear gaze and firm grasp, while they could in no wise capitulate or open the gates of the fort to him who had not the dictionary as his powerful ally.

READING.—The rule of a successful American educator and authoress (Mrs. Emma Willard) for her classes is '*to read what they study, and to study what they read*'—a most excellent rule. How can they efficiently study what they read without the aid of an accurate and discriminating lexicon? To require scholars to explain what they have read when they have not had the opportunity to consult a dictionary for the purpose of *informing* the mind, is a piece of cruelty parallel to the tyrannical edict of Pharaoh that the children of Israel should make brick without straw. Besides the meaning of every word, the proper pronunciation and accent must be known in order to read with ease and effect, which, indeed, is a rare accomplishment. And where can these be so readily attained as in the work of a judicious lexicographer?

SPELLING.—From the woeful neglect of this part of education it would seem that it mattered little whether words are spelled right or wrong. By some, who *ought* to know better by this time, 'two' may be spelled *too, to, tew, toe tu*, etc.; 'present' = *preasent, pressent presant*, etc.; 'receive' = *recieve, receeve*, etc.; 'separate' = *seperate, sepparate*, etc.; and so on, *ad infinitum*. If this plague of barbarous spelling were limited to a few unpromising pupils in each school, it would be bad enough; but what shall educators do when the evil is so wide-spread? Every pupil is more or less tainted with it; and, sad to say, it some times reaches even the teacher. The worst feature of the malady is that the person affected does not know it, and hence does not apply the balm dispensed by *Drs.* Johnson, Webster, Worcester, and others. If correct spelling is a fundamental part of education, how many intellectual palaces have weak foundations! If this criminal conduct of 'murdering the king's English' is persevered in, what a loathsome and disjointed corpse of a once strong language shall we hand down to our posterity! But thanks to the learned and laborious men who have furnished us with vocabularies which act as preservatives of our noble tongue.

COMPOSITION.—This is the art of expressing words by means of written language. No school-duties seem so irksome to the great majority of students as writing compositions. This irksomeness does not arise from their not having thoughts to express, but rather from want of appropriate language to clothe and arrange them. The attainment of an elegant diction should be the aim of every one who makes use of the pen to convey thought. What better assistant can be procured than the dictionary, whose derivation unmistakably points to diction,

which is the manner or style of expressing thoughts by words? Does it stand to reason that a person's diction should become neat, elegant, or florid, without the aid of the *diction*-ary? What better way is there of enriching our store of language than by consulting a good defining lexicon, and carefully noting the various delicate shades of the meaning of words which by the superficial scholar are often used synonymously?

The diligent use of the dictionary is better for forming a concise and elegant style in the honest and industrious pupil than all the newspapers, periodicals and books taken together. From the latter many will be tempted to take whole sentences and even paragraphs, while from the former the diligent scholar can get just the aid that he needs, no more nor less.

In conclusion: The advantage of each pupil's being possessed of a suitable dictionary* of his own follows as a necessary consequence from the foregoing premises. If teachers, pupils, and others, were for a few years to imitate the example of a certain teacher in Ohio, who spent most of his spare hours in studying the dictionary, with how much greater force and beauty should we use the bold and tasty Anglo-Saxon words of our mother tongue. Let this habit of consulting the dictionary be formed at school, and it will become a *vade mecum*, a constant companion, as it was with the late eminent Washington Irving.

The right use of words is so important that a man's character is often formed or re-formed by the employment of a word fitly spoken: and when 'every idle word' shall be brought before the Omniscient Judge, and the assembled universe of mind shall trace the *effects* of each and every word, we shall then be more able to realize THE VAST IMPORTANCE OF THE DICTIONARY IN THE SCHOOL-ROOM, *in giving our children purity of diction, and by a reflex influence purity of thought.*

* Without disparaging any others, it will not be amiss to state that Webster's High-School Dictionary is used, with gratifying results, by the members of the Warren Collegiate Institute. The pupils rewrite their compositions till they are free from orthographical errors. This rule tends to make pupils careful: and they refer to the dictionary if the meaning, spelling or pronunciation of any word is in the least doubtful to them.

ACTIVITY.—To be active is the primary vocation of man: all the intervals in which he is obliged to rest he should employ in gaining a clearer knowledge of external things; for this will facilitate activity.

GOETHE.

SCHOOL EXERCISES.

QUESTIONS SUBMITTED TO CANDIDATES FOR ADMISSION TO THE PROVIDENCE HIGH SCHOOL, 1860 (FIRST GRADE).

ARITHMETIC.—1. Multiply seventy-five hundred-thousandths by sixteen millionths, and to the product add four and eight-tenths.

2. What is the least common multiple of 6, $8\frac{1}{2}$, 10, and $12\frac{1}{2}$.

3. Divide $\frac{3}{4}$ of $\frac{2\frac{1}{5}}{7}$ of $\frac{4}{6\frac{1}{5}}$ by $\frac{.07}{6\frac{1}{2}}$ of $\frac{9\frac{1}{3}}{.006\frac{1}{4}}$.

4. How many yards of carpeting $\frac{3}{4}$ of a yard wide will be required to cover a floor $23\frac{1}{2}$ feet long and $16\frac{1}{2}$ feet wide?

5. What is the interest on \$650.40, at $5\frac{1}{2}$ per cent., for 6m. 12d.?

6. A man bought a horse for \$250.00, and sold it for 10 per cent. more than he gave for it, but for 25 per cent. less than he asked for it: What did he ask for it?

7. A grocer buys a sack of Java coffee, containing 150 lbs., at 15 cents per pound. He pays $1\frac{1}{2}$ cents a pound for roasting it, and there is a loss of $\frac{1}{2}$ an ounce to each pound: At what price must he sell it to gain 10 per cent.?

8. A capitalist sends a broker \$10,000 to invest in cotton. After deducting his commission of $1\frac{1}{2}$ per cent., how much cotton at $9\frac{1}{2}$ cents a pound ought the broker to return?

9. A piece of cloth before being sponged was $\frac{5}{4}$ of a yard wide, and after being sponged it was $\frac{7}{6}$ of a yard wide: What per cent. of its width did it shrink?

10. There is a field in the form of a rectangle. The sum of its diagonal and one of its short sides is 63 rods; one of the long sides is 42 rods: How many acres are there in the field?

GRAMMAR.—1. Write the plurals of the letters *o*, *s*, *q*, and *x*.

2. Write the possessive plural of *beau*, *church*, and the possessive plural and singular of *deer* and *sheep*.

3. Write the full declension of *one*, *other*, and *which*.

4. Parse *thine* in the sentence 'It is thine to command'.

5. Give the principal parts of *breed*, *bleed*, *feed*, *lead*, and *plead*, and state whether they are regular or irregular.

6. Analyze the sentence 'If thine enemy hunger, feed him; if he thirst, give him drink'.

7. What is an element of a sentence?

8. Point out the difference between an adverb and an adverbial element, and give an example of an adverbial clause.

9. Correct the following sentences that are incorrect, and parse the words in italics: He is a better speaker than a *writer*. The boy intended to have *lain* his book upon the table. When he *done* his sum he *set* it down. Pay me *what* thou owest.

10. Construct a sentence containing an adjective clause, introduced by a relative in the possessive case.

GEOGRAPHY.—1. Name and describe the rivers in Maine.

2. Name six of the principal cities and towns in Ohio, and describe the position of each.

3. Name and describe the rivers in Spain.

4. Name the mountain ranges in the United States.

5. Name the rivers and other bodies of water you would pass through in a voyage from Chicago to St. Petersburg.

6. Name the gulfs and bays that indent Asia.

7. Name the principal cities in the world situated between the 37th and 43d parallels of north latitude.

8. When it is 12 M. at Paris, what time is it at Providence?

9. Name the political divisions of Europe and their capitals.

10. Give the boundaries of North Carolina, and name and describe its rivers.

HISTORY.—1. Give an account of the defeat of General Braddock.

2. Give an account of the siege and capture of Quebec.

3. Give an account of the meeting of the first Continental Congress.

4. Give an account of the battle of Bunker Hill.

5. Describe the retreat of Washington from White Plains.

6. Describe the battles of Trenton and Princeton.

7. Give an account of the surrender of Burgoyne.

8. Describe the massacre of Wyoming.

9. Give some account of the treachery of Arnold.

10. Give an account of the siege of Yorktown and the surrender of Lord Cornwallis.

MENTAL ARITHMETIC.—1. What number is that which when increased by its third, its fifth, and its seventh, equals 1756?

2. A boy being asked what time it was, answered that the time past noon was $\frac{3}{4}$ of $\frac{2}{5}$ of the time to midnight. What was the time?

3. Divide 36 into two such parts that $\frac{4}{5}$ of the larger be equal to the smaller.

4. A and B invest equal sums in trade; A gains a sum equal to $\frac{1}{5}$ of his stock, and B loses $120, when A's money is equal to three times B's: What did each invest?

5. How many ninths are there in $\frac{3}{4}$ of $\frac{5}{6}$?

6. One-half and one-third and one-fifth and one-sixth of a certain number exceed the number itself by six: What is the number?

7. How many times is $\frac{3}{5}$ of $\frac{2}{3}$ contained in $\frac{4}{3}$ of $\frac{6}{5}$?

8. There is a pole one half of which is equal to one-third and one-half of the other half plus 50 feet: What is the length of the pole?

9. Divide $121 between two persons so that one shall receive $2 as as often as the other receives $3½. What must each receive?

10. A man sold his watch for $180, at a loss of 10 per cent.: What did it cost him?

MATHEMATICAL.

DIVISION OF FRACTIONS.—We have been requested to publish in the *Teacher* an analysis of the division of one fraction by another. We give herewith what we consider the best, although we some times use other methods.

Let it be required to divide $\frac{5}{6}$ by $\frac{7}{11}$. It is evident that 1 divided

(1.) $1 \div 1 = 1$ by 1=2. Since the dividend $\frac{1}{6}$ is $\frac{1}{6}$ as large as

(2.) $\frac{1}{6} \div 1 = \frac{1}{6}$ the first dividend, while the divisor remains the

(3.) $\frac{5}{6} \div 1 = \frac{5}{6}$ same, the quotient in the 2d case must be $\frac{1}{6}$ as

(4.) $\frac{5}{6} \div \frac{1}{11} = \frac{55}{6}$ large as in the first case, or $\frac{1}{6}$. The 3d dividend is

(5.) $\frac{5}{6} \div \frac{7}{11} = \frac{55}{42}$ 5 times as large as the 2d, while the divisor is still unchanged: the quotient must therefore be 5 times as large as the second quotient, or $\frac{5}{6}$. Since in Case 4 the divisor is $\frac{1}{11}$ as large as in the former case, while the dividend is unchanged, the quotient will be 11 times as large, or $\frac{55}{6}$. Finally, in the last case, while the dividend remains intact, we have increased our divisor 7 times, and must therefore diminish our quotient in the same ratio, which gives $\frac{55}{42}$ as the quotient. We find on examining our result that we have simply multiplied our dividend by 11, the denominator of the divisor, and divided it by 7, the numerator of the divisor: whence we have the rule: "Invert the terms of the divisor, and multiply numerators together for a new numerator, and denominators together for a new denominator." The inversion is merely for convenience. J. W. O.

SOLUTIONS.—V. One man $= \frac{7}{3}$ women, 1 woman $= \frac{27}{10}$ boys, 1 boy $= \frac{75}{42}$ girls. One girl can bind $\frac{500}{36}$ sheaves in one hour; 1 boy can bind $\frac{500}{36} \times \frac{75}{42}$ sheaves; 1 woman, $\frac{500}{36} \times \frac{75}{42} \times \frac{27}{10}$; 1 man, $\frac{500}{36} \times \frac{75}{42} \times$

$\frac{2}{10}\frac{7}{3}\times\frac{7}{3}$; and 12 men can bind $\frac{5}{3}\frac{0}{6}\frac{0}{0}\times\frac{7}{4}\frac{5}{2}\times\frac{2}{10}\frac{7}{3}\times 12=1875$ sheaves in 1 hour. PUPILLUS.

Another of the same.— One man $=2\frac{1}{3}=\frac{7}{3}$ women; 10 women $=\frac{3}{7}$ of $10=\frac{3}{7}\frac{0}{0}$ men, $=27$ boys; 42 boys $=\frac{4}{2}\frac{2}{7}=1\frac{4}{9}$ as much as $\frac{3}{7}\frac{0}{0}$, $=\frac{2}{3}\frac{0}{0}$ men; $\frac{2}{3}\frac{0}{0}$ men $=75$ girls; 36 girls $=\frac{3}{7}\frac{6}{5}$ of $\frac{2}{3}\frac{0}{0}=\frac{1}{5}\frac{6}{0}$ men. If $\frac{1}{5}\frac{6}{0}$ men can bind 500 sheaves, 1 man can bind $\frac{5}{1}\frac{}{6}$ of $500=156\frac{1}{4}$: if 1 man can bind $156\frac{1}{4}$ sheaves, 12 men can do 12 times as much, $=1875$ sheaves. S. E. STOUT.

VI. The ten persons should each pay 26 weeks' rent $=260$ weeks'; the first 4 new lodgers each 12 weeks' $=48$ weeks'; the second 4 each $9=36$; the 3d 4 each $6=24$; the 4th 4 each $3=12$. The whole number of weeks $=380$, for which \$500 is paid: $\therefore \$\frac{5}{3}\frac{0}{8}\frac{0}{0}=\frac{2}{1}\frac{5}{9}=$ rent per week. Those of the first class pay each $\frac{2}{1}\frac{5}{9}\times 26=\$34.21\frac{1}{1}\frac{}{9}$; those of the second class, $\frac{2}{1}\frac{5}{9}\times 12=\$15.78\frac{1}{1}\frac{8}{9}$; of the third, $\frac{2}{1}\frac{5}{9}\times 9=\$11.84\frac{4}{1}\frac{}{9}$; of the 4th, $\frac{2}{1}\frac{5}{9}\times 6=\$7.89\frac{9}{1}\frac{}{9}$; of the 5th, $\frac{2}{1}\frac{5}{9}\times 3=\$3.54\frac{1}{1}\frac{4}{9}$. PUPILLUS.

VII. A rides 100 miles, B 100, C 85, D 25, making in all 310 m.

A pays $\frac{1}{3}\frac{0}{1}\frac{0}{0}$ of \$25, which $=$	\$8.06$\frac{14}{31}$
B pays $\frac{1}{3}\frac{0}{1}\frac{0}{0}$ of \$25, which $=$	8.06$\frac{14}{31}$
C pays $\frac{8}{3}\frac{5}{1}\frac{}{0}$ of \$25, which $=$	6.85$\frac{15}{31}$
D pays $\frac{2}{3}\frac{5}{1}\frac{}{0}$ of \$25, which $=$	2.01$\frac{19}{31}$
Total	\$25.00

H. P.

[NOTE.—The solution of Prob. VII and the second of Prob. V are by scholars of Pupillus. Neither had any help. Miss Stout is thirteen years of age.—ED.]

PROBLEMS.—XII. A gentleman purchases a farm for \$3600, and agrees to pay \$600 down and the remainder in 5 equal semi-annual installments. At what time may the whole be paid at once?

XIII. A carpenter, having sawed off a piece from a board 30 inches wide, found that, in stead of sawing in a straight line, he had sawed in the arc of a circle of which the straight line was the chord. The distance between the centres of the arc and chord being $\frac{1}{4}$ of an inch, what is the diameter of the circle? J. W. O.

XIV. On a plane inclined 30° grows a tree 250 feet high. At what point must it be broken off that, falling down the hill, one end resting on the stump the other may strike a point 100 feet from the foot of the tree? At what point if it fall up the hill? Maine Teacher.

OFFICIAL DEPARTMENT.

DEPARTMENT OF PUBLIC INSTRUCTION,
Springfield, Ill., May, 1862.

REMARKS ON THE 67TH SECTION.

SECTION 67 of the present Act is as follows:

School-funds collected from taxes levied by the orders of the directors, or from the sale of property belonging to any district, shall be paid out on the order of the directors; and all moneys and school-funds liable to distribution, not being principal, paid into the township treasury, or coming into the hands of the township treasurer, shall be paid out only on the order of the proper board, signed by a majority of the board, or their president and clerk; and for all payments made receipts shall be taken and filed; and in all such orders shall be stated the purpose for which or on what account drawn; and all such orders may be in the following form, to-wit:

The treasurer of township number ———, range number ———, in ——— county, will pay to ———, or bearer, ——— dollars and ——— cents (on his contract for repairing ——— school-house, or otherwise, as the case may be). By order of the board of ——— said township.

C. D., *Clerk.* A. B., *President.*

Which, together with the receipt of the person to whom paid, shall be filed in the office of the township treasurer.

It is here provided:

1. That all school moneys, without distinction, that are or may be in the hands of any township treasurer to the credit of a particular school-district, shall be paid out only on the order of the directors of said district. This applies equally to all school-funds, state, county, township, special district taxes, proceeds of sales of district property, etc.

2. That all such orders must state the specific purpose or *indebtedness* for which they are drawn, otherwise they will not be legal.

3. That all such orders, to be legal, must be signed by a majority of the board of directors, or by the president and clerk of said board.

The opinion is entertained by some that an order on the town treasurer drawn by the directors in favor of themselves, or any other person, and stating the purpose for which said money is required, is sufficient to authorize the treasurer to pay said order according to its terms, notwithstanding said money may not be *actually due.* For instance, if the directors propose to purchase furniture for their school-house, they may draw their order for the required amount, and the

treasurer must pay the same, although the furniture is not yet purchased and the money of course not actually due.

That this opinion is not well-founded will clearly appear, I think, if we examine its relations to other parts of the Act and consider the consequences to which it would logically tend. If directors may draw funds from the treasurer *to be* expended for articles not yet purchased, however useful and necessary those articles may be; or for contracts or parts of contracts *to be* executed, however legal those contracts may be; or for services *to be* rendered, however legitimate those services may be; it *in effect* authorizes them, should occasion require, to withdraw *all* the funds from the township treasurer, and to become, temporarily at least, themselves the custodians of those funds in stead of the township treasurer.

This would be in conflict with the manifest intention of the legislature in constituting the township *treasurer* the only legal depositary and custodian of all unexpended township and district funds, and requiring *him alone* to give bond for their safe keeping. [Section 55.]

It would enable the directors to do indirectly what they can not do directly, which is contrary to a familiar principle governing the construction of statutes. The directors have no authority to claim or to assume the *custody* of district funds, for any time, however brief, nor for any purpose, however honest and legitimate. They can not appoint a local district treasurer (except in cities and incorporated towns, under special acts) and transfer their funds to his hands. They give no bond, and are therefore, in a legal sense, wholly irresponsible. The funds are subject to their order, and may be drawn by them in payment of debts legally contracted and due. This would seem to be all that is necessary, and it is believed to be all that is intended and authorized.

And if the treasurer would not be authorized to pay such orders when drawn by the directors in their own favor, much less would he be justified in doing so when such orders are drawn in favor of others. If prudence requires that not even *directors* should be allowed to receive any part of the funds in advance of actual indebtedness, still stronger reasons would forbid that *others* should be allowed to do so.

Any other practice than that here recommended would be fraught with danger to the funds, misunderstanding, and difficulty; or if these evils should not ensue, it would be because favoring circumstances prevented an erroneous principle from producing its legitimate results. The purchase of the articles, or the letting and execution of the contract for which the funds were drawn, might be delayed, indefinitely deferred, or abandoned altogether. In the mean time the money, for

one reason or another, is not returned to the treasurer: perhaps it is converted to private use; or it may be loaned or lost. Once admit that funds may be drawn to meet *anticipated* debts, and the treasurer would have no security against fictitious orders, and dishonesty in almost every form.

A fair interpretation of the Act, as well as the plainest considerations of prudence, would therefore seem to indicate that orders should not be paid unless drawn in favor of *bona fide* creditors of the board, and in payment of *debts actually due.*

If it is urged in opposition to this view that it would compel directors to advance their own money for school purposes and afterward draw it from the treasurer, and that this could not have been the intention of the legislature, it is perhaps a sufficient answer to say that the objection will be without force until it can be shown that articles necessary for schools can not be obtained, and needful services can not be secured, without payment *in advance.* It is believed that those who furnish supplies or render services to schools will be satisfied, as a general thing, to be paid *when* the supplies shall have been furnished, or the services rendered.

A school-director can not be interested in any contract made by the board of which he is a member [Sec. 42]; but, without any violation of the spirit and intent of this prohibition, a district may become indebted to a director. In such cases the order on the treasurer should be drawn by the *other two* directors in favor of the director to whom the district is indebted. An order signed by two directors in favor of one of said two is manifestly improper, and of questionable legality. The order must be 'must be signed by a majority of the board', that is, by at least two members; and it is held that the two who sign should be different from, or exclusive of, the one in whose favor the order is drawn. No other view, it is believed, would satisfy the spirit of the requirement. [Section 67.]

The word 'board', in the seventh line of Section 67 (fifth line of the section as printed on page 198), means board of *directors.*

The blank in the last line of the form of directors' order should be filled with the words following, viz: 'Directors of District No. —, in'.

I have expressed the opinion in former circulars that so far as teachers' salaries are concerned the schedule itself, properly certified, is a valid order, authorizing the treasurer to pay the amount certified to be due. But while the correctness of that opinion is not doubted, yet, for the sake of uniformity and still greater security, it is recommended that hereafter orders be drawn in favor of teachers, in addition to the schedules, the same as in all other cases, as required in Section 67.

CAN TOWNSHIP TREASURERS LOAN TO THEMSELVES ANY PART OF THE TOWNSHIP SCHOOL-FUNDS?

It would seem that the answer to this inquiry should readily suggust itself without argument: that the inconsistency of the transaction should be self-evident. But as a different opinion and practice have extensively obtained, it will be of use to give the point a brief examination.

That township treasurers should not and can not lawfully become borrowers of the school-funds of the townships of which they are treasurers will appear from the following considerations:

1. The township treasurer is the agent of the board of trustees, through whom alone all loans must be effected and all contracts connected therewith be executed. [Section 57.] In all valid contracts there must be at least two parties—one empowered to negotiate, the other competent to be negotiated with. These two parties can not be identical, or the powers of each be merged in the same person. This would be a contradiction in terms, and subversive of the primary rules of mutual obligation. In loaning the township funds the parties are the *treasurer* and some other person or persons. not the *trustees* and some other person; for the trustees, as we have said, can not act in the premises except through their agent, the treasurer. The treasurer and the borrower, then, are the parties. The treasurer, as the agent of the trustees, is authorized to inquire into the character and responsibility of the proposed borrower; to scrutinize and pass upon the proposed personal securities, or the value and condition of the real-estate proposed to be mortgaged; and, in view of all the facts, to accept or decline the application, as he may think most for the interest of the township and the safety of the funds. On the other hand, the borrower must apply to the treasurer, submit himself and securities to the judgment and decision of the treasurer, and comply with all the conditions which he may lawfully impose.

But how is it when the treasurer assumes to lend to himself? Does he not personate both lender and borrower? Does he not sit in judgment upon himself, and adjudicate in his own favor all those points which affect the trustworthiness of a borrower? Can he separate his individual from his official character, and proceed as John Smith the private citizen to contract with John Smith the township treasurer? And how would the interests of the township be protected in such a transaction? Who would there be to see that the safeguards of the law were enforced in such loans? Is not the conclusion irresistible, from this line of argument, that a township treasurer should

not borrow, or loan to himself, the township school-fund of which he is the custodian.

2. Not only is there no one with whom the treasurer can lawfully make the contract in loaning to himself, but another difficulty presents itself. The execution of securities may be denied by plea of *non est factum*. In such case the testimony of the township treasurer is conclusive as proof that the securities were duly executed. But suppose that plea is made by the township treasurer himself in denial of the execution of his own securities as a borrower of the fund: how or by whom shall the township prove them? What recourse would there be in such an emergency?

3. All books, notes, bonds, mortgages, and all other evidences of indebtedness belonging to the township, are, by law, in the exclusive custody of the treasurer, who is required to safely keep the same, and to lay them before the trustees at their semi-annual meetings. [§§ 52 and 53.] If, therefore, the treasurer loans the funds to himself, he must keep and hold all of his own notes and other written securities. But this would afford strong temptation to fraud, and be in direct conflict with the familiar doctrine in equity that temptation should be removed, and a constant sense of personal responsibility and personal interest be kept alive. This principle applies to all who, like the township treasurer, act in a fiduciary capacity.

Holding these evidences of his indebtedness in his own hands, it would be easy for him, with comparative impunity, to refuse to produce them on demand, or even to destroy them; and the temptation to do so might under some circumstances be irresistible. The temptation to deception and fraud would beset him again on retiring from office, when he is commanded by Section 65 to deliver all moneys, notes, bonds, etc., to his successor in office. With what facility could he withhold, conceal, or destroy, the written proofs of his own indebtedness. Is it wise to throw such temptation around a public officer? Could it have been the intention of the legislature to authorize such a state of things, or to allow such a force of temptation to bear upon the treasurer to swerve him from the line of rectitude? To suppose this would be to suppose that the legislature could approve of conduct subversive of all the safeguards of the public interest, and of every principle that should govern trust relations and duties and well-regulated official conduct.

The tendency is to bring the treasurer's individual interests in conflict with his fiduciary obligations. We should not commend the prudence of the man who would allow a debtor to *retain in his possession* the notes or other evidence of his indebtedness. Trustees

who allow their treasurer to borrow the money and then keep the notes himself *do that very thing*. The laws governing commercial paper will need to be materially changed before the drawer and not the drawee is deemed the proper custodian of unpaid notes; before payer and payee are allowed to change places. What is wrong in the case of other business men can not be right in the case of township treasurers in like circumstances.

4. The treasurer must demand all moneys, papers, etc., belonging to the township. [Section 62.] Can he make this demand of himself? And, if it should be essential, how shall such demand be proved? Again: If additional security shall be required by the trustees for the payment of money loaned, Section 60 commands the treasurer to institute suit for the recovery of principal and interest. Can he institute proceedings against himself? If not, how shall the additional security be obtained and the interests of the township be protected? Is such protection to be found in the *official bond* of the treasurer? Certainly not. That bond simply obligates the treasurer to discharge all the duties of his office according to law. To hold that the treasurer can go on and borrow the township funds on said bond, without giving the securities required in Section 57, would surely be the extreme of absurdity. The only ground on which the treasurer would be liable on his bond, in the premises, would be that of illegal conduct in loaning the funds to himself; but this would be fatal to the assumed right in question, and conclusively sustain the position here taken, that such loans are not legal; for that can not be lawful for doing which an officer is liable on his own bond.

Again: If default be made in the payment of the half-yearly interest due on township loans, Section 61 commands the treasurer to bring appropriate action for the recovery of said interest; and the question arises, as before, Shall he sue himself? If he can not bring an action against himself to recover the principal as required in Section 60, neither can he to recover the interest as required in Section 61; the reasonings applicable to the former case are, *mutato nomine*, just as applicable to the latter.

5. The treasurer is the creature and agent of the trustees; and if they may loan to him, or allow him to loan to himself, it is difficult to see why he may not loan to them, or allow them to loan to themselves or to each other; and thus every vestige of security for the money would be gone: the township officers might speculate in the school-funds without let or hindrance; the desire to get control of the money would incite to fraud and corruption in the election of trustees and the appointment of treasurers; avarice, bribery, dishonesty, and deceit,

would mark the history of the management of the funds, and the beneficent purpose of the legislature be utterly defeated.

We are thus brought to the conclusion, irresistibly, it seems to me, that the township treasurer can not loan to himself the school-funds of his township, either with or without the knowledge and consent of the board of trustees. The practice is condemned by sound fiduciary principles; condemned by a fair interpretation of the 60th and 61st sections of the Act, and by logical inference from other portions of the law; is fraught with strong temptation to fraud, and consequently with imminent danger to the security of the funds and the pecuniary interests of the townships. For these reasons, and others which could be given, the practice *should be wholly discontinued.*

WHO MAY ORDER DISTRICT ELECTIONS?

It is held by some that upon petition of ten citizens of a district, legal voters, it is the *duty* of the directors to order an election for the purpose or purposes specified in said petition and according to the terms thereof.

It is believed that no such duty exists. If it does, it must be by virtue of the law of 1849, for in no other act can I find any such provision. But that act, together with the Acts of 1851 and 1853, has not only been once repealed, but the repealing clause has been four times enacted:

1. By the Act of February 15, 1855. *Vide* Laws 1855, p. 90.
2. By the Act of February 16, 1857. *Vide* Laws 1857, p. 297.
3. By the Act of February 21, 1859. *Vide* Laws 1859, p. 38.
4. By the Act of February 22, 1861. *Vide* Laws 1861, p. 39.

In all these laws the Acts of 1849, 1851 and 1853 are *wholly* and expressly repealed, and the *conflicting parts* of all other acts are also repealed. Of course the provision in question, making it the duty of the directors to call a meeting on application of ten citizens, is no longer in force.

If it should be replied that the three acts named above are not repealed as entire acts by the 97th section of the present Act, but only such parts of them as conflict with the provisions of the present act, the fact still remains that the duty enjoined by the Act of 1849 has ceased to exist; for said provision of said Act of 1849 *is* in manifest *conflict* with the mandatory rule prescribed in Section 42 of the present law. Directors can not be *required*, therefore, by petition of ten citizens to order a district election. They have discretion, and must exercise their best judgment in the premises, subject only to the penalties provided by law for palpable neglect of their official duties and

of the educational interests of their districts. If they fail or refuse to order an election when the public interest imperatively requires that such election should be held, they may, upon proof of the refusal and of the public necessity, be compelled by *mandamus* to cause the meeting to be held.

THE SCHOOL MONTH.

So many questions are submitted to this office with reference to the number of days that shall constitute a school-month, and such diversity of opinion and practice exists in different parts of the state, resulting in misunderstandings between directors and teachers and vexatious delays in the payment of schedules, that it seems necessary to establish a definite rule on the subject.

It is to be regretted that the question was not settled by the last legislature; but as the point is one of considerable practical importance, and the Act is entirely silent upon it, it would clearly seem to be the duty of the Superintendent, under the 8th section of the law, to 'make such rules and regulations' in the premises 'as he may think necessary and expedient'. According to the authority conferred and the duty imposed in the section above referred to, the following regulations are therefore prescribed for the government of teachers and school officers, in the matter under consideration, until a different rule shall have been prescribed by the legislature or the Supreme Court:

1. The lunar month, or four weeks, shall be considered the true common-school month in this state.

2. At least twenty days shall be taught for a month; sixty days for three months; one hundred and twenty days for six months, etc.

3. Directors may *contract* with teachers on the calendar in stead of the lunar-month principle, and such contracts, previously made, shall be valid and binding upon both parties; but less than twenty teaching-days shall not be considered a lawful school month.

4. In the absence of any special agreement or contract between directors and teacher, as above, the *lunar month* of *twenty teaching-days* shall be adopted as the true basis of settlement, and shall be accepted, held and construed by directors, trustees, treasurers, and others, as satisfying the demands of the law.

The number of teaching-days in a calendar month is between one and two days more than in a lunar month; there being in the latter just twenty teaching-days, and in the former between twenty-one and twenty-two days. The difference in a school of six months is about ten days. Directors udoubtedly have the right to stipulate with teach-

ers on the calendar-month principle if they think proper; and if teachers voluntarily enter into such an agreement they are morally and legally bound by it. But it very often happens that nothing is said on the subject by either party until the school closes, when a difference of opinion is found to exist, leading to endless confusion and strife. It is to provide a uniform rule and to avoid trouble in *such* cases that this decision is made.

The adoption of a fixed and uniform rule is necessary, not only to prevent trouble between teachers and directors, but also to enable township trustees and treasurers to interpret and enforce the six-months rule with justice and regularity. Every district in the state is required to have a free school for at least six months in each year. [Sec. 48.] This provision is mandatory. The district failing to comply forfeits its claim to the school-fund the next year. How shall the fact of such failure be ascertained and the penalty be enforced? Not through the *directors*, for they could not be expected to report the fact and invite the consequences of their own delinquency. The *trustees* are clearly the officers through whom the delinquent districts must be reached. The schedules on file in the treasurer's office afford positive proof as to whether the districts have or have not complied with the law. Accordingly, under the authority conferred by Section 9, I instructed the trustees in my circular of March, 1860, to withhold the school-fund from districts failing to maintain six months' school as required by law.

In the exercise of the duty intrusted to them, the questions at once arose: What shall be the standard? How many days shall be taught for six months? Shall the calendar or lunar-month principle be adopted? etc. There being nothing definite in the statute for their guidance, the trustees applied either the one principle or the other, or adopted a rule different from either, or neglected the matter altogether, at their discretion. There was little uniformity and much complaint. In this state of things, the propriety and duty of defining the school-month, and establishing a rule for the trustees that shall be the same throughout the state, can no longer be doubted.

In correspondence on this subject I have always held substantially the views here given, but have not heretofore supposed it necessary to fix a *minimum* below which directors should not go. Their tendency to increase rather than lessen the school-month has seemed too decided to require any check in this direction. But it will readily be seen that such a limit is necessary; for if the directors were at liberty, without any restriction, to fix by previous contract with the teacher the number of days in a month, and if the trustees were absolutely bound

by such contract, it is manifest that the purpose of the legislature might be defeated, and that the license might be carried to the most absurd extremes. Is it asked What possible *motive* could induce the directors to so injuriously shorten the school-month? The answer is at hand. Without six months' school no district can share in the distribution of the public fund. There is, therefore, a very *strong incentive* not to fail in this respect. Now, suppose a certain district should seek to retain its claim to the school-fund, and yet evade a direct tax, or reduce that tax to the lowest possible figure. Would not the above principle furnish the very means desired, and would not the district at once take refuge behind that principle?

They would reason in this way: "The times are hard; we must tax as lightly as possible; we have public money enough to run the school, say, ninety days, without any tax at all: let us, then, contract with the teacher for six months at, say, *fifteen days* to the month, and pay him *in proportion!* The trustees will be bound by this agreement, bound to consider us as having complied with the law, and so we shall avoid a tax and shall not forfeit the public funds." That a rule of action capable of being so perverted can not be sound is self-evident.

In my circular of March, 1859, the opinion was advanced that if the question under consideration was referred to the courts, and no previous contract existed between the directors and teacher, the term 'month' would be taken in its ordinary signification, with no discrimination in favor of teachers. But I have since learned that the point is rarely decided, in this state, upon this broad and purely legal principle, for the reason that it is contrary to the *universal custom of the country* to require twenty-six days to be taught for a month. In adopting the lunar as the true school-month for the state, I have simply recognized the principle which has been judicially sanctioned: it being now, and having for many years been, the general usage throughout the state to allow twenty days to be taught for a month, sixty for three months or a 'quarter', etc. It would be easy to show that this custom is not a mere caprice, but is founded in wisdom, and is the best for schools; but it is not necessary.

Those who tenaciously insist that nothing less than six calendar months can satisfy the law, are wont to cite the language of the Act itself ("shall establish and keep in operation for at least *six months* in each year." [Sec. 48]) as decisive of the question. They insist that when the legislature say six months they mean six months; that the term needs no interpretation; that custom can not make a month either more or less, etc. This looks plausible; but to refute the argu-

ment and demonstrate its inconsistency, it is only necessary to suggest that if a literal interpretation demands a full calendar month, it also demands six days in the week, and at least ten hours in the day, just as much. But none ask or expect this. Why? Simply because universal custom forbids. If the rule of six hours a day and five days a week is admitted, merely because general usage requires it, the argument for a strict and literal interpretation of the word 'month' must be abandoned.

The recommendation is renewed that directors and teachers come to a distinct understanding on this subject in the outset. If the directors wish all the days in any month or six months to be taught except the Saturdays and Sundays, let them so covenant in writing with the teacher, and the contract will be valid. If no agreement is entered into, the time will be computed on the basis of twenty teaching-days for a month, and upon this basis the trustees will determine whether a given district has or has not complied with the six-months rule of the law.

Since writing the above I find that precisely the same rule has been adopted in Pennsylvania. The able and experienced Superintendent of Common Schools of that state, in his last Report to the legislature, says: "The lunar month is really the school-month; school-terms opening and closing with the *week*, the work of the school proceeding on the same principle, etc. Accordingly, it is recommended that the lunar month be, in all school affairs and contracts, the school-month." [Pennsylvania School Report, 1861, pp. 27, 28.]

STATE SCHOOL-TAX.

In reply to numerous inquiries as to the cause of the falling-off in the amounts of the Auditor's warrants issued to school commissioners this year, I would state that it is entirely owing to the *diminished valuation of property* in 1861 as compared with 1860. The rate per cent. levied (two mills on the dollar) is just the same; it has not been changed since the free-school law was first enacted. This being so, the net proceeds of the tax will vary, of course, according to the assessed value of taxable property. The valuation of property fluctuates with the commercial and financial prosperity of the state and the condition of the country at large. The amount of state tax apportioned to the counties by the Auditor, for the last seven years, is as follows:

Amount	appropriated	in 1856	$606,809
"	"	" 1857	660,000
"	"	" 1858	743,000
"	"	" 1859	763,231

Amount appropriated in	1860	$738,283
" "	" 1861	678,751
" "	" 1862	600,000

It will be seen from the above table that the proceeds of the tax steadily and rapidly increased from 1856 to 1859, when they reached the maximum, and that from that year to 1862 there has been a marked decline; the amount apportioned in 1862 being less than in 1856. The amount distributed in 1861 was about nine per cent. less than the previous year, and the amount distributed the present year is seventy-eight thousand dollars, or about 12 per cent., less than last year. School commissioners will therefore understand why it is that their warrants are so much less than they had expected. It is from no error in the apportionment, but from an actual and heavy diminution in the proceeds of the tax; and this diminution is caused by the inevitable decline in the assessed value of taxable property incident to the prostration of business and the distracted state of the country. There will probably be a still further decline of the income from the state tax from the continued operation of the above causes, and this should be anticipated and provided against by district directors and other school boards in the local taxes to be levied the current year. I do not think the falling-off will be nearly so great next year as it is this, possibly none at all; but still it is prudent to be prepared for such a contingency, so that directors and boards of education may not find themselves, next spring, unable to pay their teachers and meet their

Careful census returns should be annually made to *school commissioners* and *township trustees*, because the annual apportionments made by those officers are strictly governed by said returns [Sections 16, 34]; but the dividend of the Auditor is made upon an entirely different basis.

Thus we see that, the rate per cent. being the same for 1860 and 1861, while the assessed value of real-estate was much less the latter year than the former, the *proceeds* of the state tax are necessarily diminished in the same ratio; and the proceeds, or amount to be distributed, being less in 1862 than in 1861, while the census basis is the same for the two years, the portion accruing to each county this year is of necessity proportionately diminished.

The *interest* warrants issued this year are each a trifle *more* than last, because the principal of the *school-fund proper* has slightly increased; and the interest paid by the state being fixed, the income is of course increased in the same proportion.

EXAMINATION.

The Third Examination of teachers for State Certificates will be held in the City of Springfield, commencing at nine o'clock A.M., on Wednesday, August 6th, and continuing two days. Teachers who propose to attend will apprise me of the fact as soon as practicable.

NEWTON BATEMAN, Sup't Public Instruction.

EDITOR'S TABLE.

EDITOR'S CHAIR.

Acknowledgment.—It has been the misfortune of the Senior Editor since the opening of the new year to be prevented the use of the pen, by a severe attack of sickness affecting the right hand and arm. It is a source of pleasure to acknowledge the assistance of many kind friends who have furnished original matter for our pages, and to thank particularly Mr. S. A. Bruce, Mathematical Editor, of Chicago, and our brother Mr. James Gow, of Dixon, for preparing and arranging the matter for the February, March and April numbers. We feel greatly encouraged by the kind notices of our cotemporaries and by the increase of our subscription-list—evidences to us that the character of the *Teacher* is still sustained.

In resuming our pen, we hope still to have the assistance and coöperation of the friends of school improvement and reform. We want help in several ways; every teacher can do something to extend the usefulness of the monthly by bringing it to the notice of directors and teachers, and by giving us the benefit of his experience and observation in *short, carefully-prepared articles*. Be concise, careful, and spicy, avoid dullness, diffuseness and negligence, and the articles furnished will be read and appreciated. Practical views, carefully set forth, are desired especially by young teachers. What to teach may usually be gathered from text-books; how to teach must be learned from the observations and experience of others, communicated by the means of educational journals.

Provincialisms.—This term is applied to peculiarities of language found in different provinces or sections of a country, not constituting a different language or dialect. In some of the older countries of the world, where successive generations have lived in the same localities for even hundreds of years, marked differences are found within a few miles' travel, such as we can have little idea of in this country, where the unceasing movement of population brings all classes in such continual contact. Thus in France and England those of some provinces or counties can scarcely understand those of others. In this country these differences are chiefly in single words and expressions, and in general cause more amusement than perplexity to those who hear them for the first time. Thus we know what the Pennamite means when he asks the milkmaid if she has *paided* the cows; or the Hoosier who tells of being *mighty weak* after the ague and taking a *powerful sight* of quinine, or of raising a *right smart chance* of corn. The Yankee's *guess*, the Jerseyman's *reckon*, with the *lay out* and *calculate* of others, are readily understood by all. At the South occur many expressions that would strike

us as ludicrous and strange: in fact, such expressions as *mighty weak* and *powerful sick* are north of the Ohio river by importation rather than as a growth of northern soil. The southern house-servant thinks a *heap* of her mistress, and is *mighty* careful of the children.

Some of our provincialisms usually escape our notice because we have grown up in their use. One of the most common faulty expressions in this part of Suckerdom is a peculiar use of two negatives. A person will make a remark denying something, and immediately add 'I do n't think', thus denying the negative just given by what is intended as a further denial of the matter already denied. Thus, a person says 'John won't be here, I do n't think'. Very few in this region are free from this error. The statement just quoted should be 'John will not be here, I think'.

In some localities the good housewives speak of *soaking* their bread in stead of *baking* it. But one of the most singular provincialisms here is one based on a southern local custom. Some years ago I heard of a young lady's dying from *dipping*. Probably most will wonder, as I did, what the *dipping* was. It was thus explained: in South Carolina, where this young lady lived, as well as in other parts of the South, it is a common custom for ladies after dinner to loll on a sofa, with a wide-mouthed bottle filled with snuff in one hand, and in the other a little stick with the end chewed to a brush, which is from time to time *dipped* into the bottle and then rubbed upon the teeth. Hours are often spent in this way. The young lady had simply died from excessive use of snuff taken as indicated. S. T.

Necrology.— John W. Audubon, last son of the celebrated naturalist J. J. Audubon, died recently at his home near New York. He was engaged in getting out a new edition of his father's great work, 'The Birds of America'.

Thomas Hartwell Horne, the author of Horne's *Introduction to the Bible*, died January 27th, at the age of 81. His first work was a little treatise issued in 1800, written when he was only 18; he had therefore been an author over 60 years. Allibone lists 41 books published by him, beside which he wrote numerous sermons and articles for reviews, etc.

Cornelius Conway Felton, born at Newbury, Mass., November 6, 1807, died at Chester, Pa., February 26, 1862. He graduated at Harvard in 1827, and after five years of teaching, partly as tutor at Harvard, he in 1832 became College Professor of Greek at that institution; and in 1834 he was appointed Eliot Professor of Greek Literature. That post he resigned two years ago, being chosen President of the University. His literary labors have been various, consisting largely of contributions to the journals of the day, the *North American*, the *Christian Examiner*, and the *New American Cyclopedia*, as well as lectures and addresses. His best-known works are his editions of Homer, and of some of the works of Æschylus, Isocrates, and Aristophanes; he also composed a Greek Reader. He assisted Longfellow in the compilation of the 'Poets and Poetry of Europe', and translated and edited several valuable European books, chief of which may be mentioned, Menzel's *German Literature* and Guyot's *Earth and Man*. His labors for education were not confined to his own college: he was a member of the Massachusetts Board of Education, a regent of the Smithsonian Institution, and was warmly interested in popular education. He died of enlargement of the heart, not yet old in years, though old in labors and in honor. ŧ.

REPORT OF THE SUPERINTENDENT OF COMMON SCHOOLS OF PENNSYLVANIA FOR THE YEAR ENDING JUNE 3, 1861.—Any one fond of statistical information will find enough of it in this volume of more than two hundred and fifty finely-printed octavo pages. We have run them over until our eyes ached. It contains a tabular statement by townships of all the items of receipt and expenditure; tax levies and rates per cent.; number, sex, and cost of tuition, of the scholars; and the number, sex, and average wages, of the teachers in every one of the sixty-four counties of the state: all together a very valuable volume to the people at home. We gather from it the following items of interests here:

Whole number of school-districts in the state		1,797
Whole number of schools		12,245
Whole number of pupils		660,295
Average attendance of pupils		439,278
Average length of school-term		5mo. 18 days.
Total cost of instruction	$1,773,666 07	
Total cost of fuel, etc	366,124 09	
Total cost of houses and repairs	527,909 60	
		$2,900,501 60
Average cost of each pupil per month		$.60
Whole number of male teachers		8,629
Whole number of female teachers		6,865
Average salary of male teachers per month		$25 68
Average salary of female teachers per month		19 71

B.

THE MADSTONE.—A bit of testimony against the efficacy of the 'madstone' has come to our knowledge. The belief of some is that the 'madstone' is a certain cure for bite of mad dogs, or for other poisons from bites. Being applied to the wound, it is said to draw the poison till it is saturated, when it turns green, is then washed in sweet milk, and replaced till all poison it extracted. Some accounts represent that it will adhere till all poison is absorbed, when it will no longer adhere. During last winter Daniel Kent, a 'section boss' on the Illinois Central Railroad, living at Polo, was bitten by a mad dog. He went the same week to see a person near Chicago having a 'madstone', with whom he staid some time, and was pronounced free from poison. He also went into Wisconsin to see the owner of another 'madstone'; by whom he was told there was no poison in his system. About nine months from the time he was bitten he was taken with hydrophobia and died.

S. T.

INDIANA, PLEASE NOTICE.—Will the Editor of the *Indiana School Journal* please observe that in crediting the article on page 105, entitled 'Object-Lessons', to the *Connecticut Common-School Journal*, he has inadvertently slighted our friend Bateman's claim as its author. See Bateman's Report, 1859–60, p. 53.

Recent Geographical Notes — (*Condensed from the Independent*).— Dr. Mouat, of the Bengal army, communicates to the Royal Geographical Society information respecting the natives of the Andaman Islands, a mountainous and volcanic group in the Bay of Bengal. The natives have been deemed ferocious cannibals; but, though warlike, they are not cannibals, nor utterly savage. Their average is 4 ft. 9 inches. They do not appear to be allied to the Papuans, or to the Negroes, or to any known race. Prof. Owen says that they show peculiarly excellent physical development, except in size.

— It appears that Messrs. Burke and Mills, who perished recently in an exploration of Australia, died through the neglect of officials who broke up a frontier dépôt of provisions arranged for them, because they did not believe that the explorers could get through the wilderness. They did, however, struggle through, and then died of want.

— Capt. R. F. Burton has been appointed British consul at Fernando Po, and has explored the Abbeokuta river, which he found to be navigable to a place called Aso, where a ridge of rocks crosses it.

— When the missionaries Krapf and Rebman, in 1847, reported the existence of Mts. Kenia and Kilimandjaro, in the southeast part of Central Africa, their report was doubted by some whose theory that there is no central range of mountains there was damaged by the statement. A recent survey of Kilimandjaro by triangulation from Mombas and partial ascent of the mountain gives better knowledge of it. Baron Von der Decken and Mr. R. Thornton, the latter formerly with Livingstone, spent nineteen days in survey of the mountain, ascending it 8000 ft., and ascertaining its hight to be 21,000 ft., the upper 3000 ft. being covered with snow. The probability seems to increase that this range is the source of the Nile.

— A French traveler, Tremaux, has returned from an exploration of Asia Minor in which he determined the sites of forty Greek cities, examined their remains, and obtained many valuable antiquarian relics, inscriptions, coins, etc. He reports the city of Perga, in Pamphylia, in a wonderful state of preservation, with its original walls and towers standing, and rich porticoes and public buildings so far preserved as to afford unusual opportunity for the antiquarians.

— Evidence is reported to be accumulating against the accuracy of DuChaillu's estimates of distances and locations in his rambles in Western Africa. Some Englishmen are organizing an expedition into that region to verify or correct his statements.

them. During the military movements of the campaign of Italy in 1859 balloons were tried, but gave no satisfaction.

Cannonading and Rain.— The *London Review* publishes the result of some observations made by a Mr. J. C. Lewis, dating from 1825 downward, tending to show that the discharge of heavy artillery has an effect in occasioning rain on the same day or the day following. The early battles of the late war between France and Austria were succeeded by such copious rains that even small rivers were not fordable; and during the great battle at Solferino a storm arose of such fierceness that for the time the conflict ceased. On July 21st the battle of Bull Run was fought, and the next day the rain was copious all day and far into the night.

Lewis's System of Gymnastics.— Mr. G. S. Haskell, who was one of the class that graduated last summer at Dr. Lewis's institution, has spent the winter lecturing, and instructing classes in different parts of the West. We have heard of a particularly successful class he had at Kalamazoo. He gave a very entertaining and instructive lecture at the High School to the Chicago teachers March 15, going through with a sufficient number of each class of movements to give to all present a clear idea of the subject. We bespeak for him success wherever he may go. B.

Parrott Gun.— The Parrott gun is named after its inventor, Mr. R. P. Parrott, of West-Point foundry. The *Scientific American* describes it as 'a cast-iron muzzle-loading rifled gun [*i.e.* cannon] with a wrought-iron reinforce shrunk on, and with its breech made of a separate steel pin', which is made into a screw and screwed tightly in to close the bore at the rear. We some times read in the papers of James's guns and Sawyer's guns: those men only invented projectiles to be used in any rifled cannon. P.

Diphtherias.— In diphtheria there are white spots in the throat caused by certain scales formed there. Some physicians cauterize the same with *lunar caustic* to remove the scales. A mother of our acquaintance, in whose family this disease was prevailing, told a friend who inquired after their health that 'she had got all the diphtherias out of James's throat but one, and Johnny did n't have but one diphtheria in his throat'. S. T.

Australia.— A manuscript map has been discovered which shows that the northwest coast of Australia was discovered in 1601 by a Portuguese named Manoel Godinho de Heredia. This date is five years earlier than the earliest previously-known discovery by a Dutch. The king of Portugal has conferred the honor of knighthood of the Tower and Sword upon Mr. R. H. Major, of the British Museum, for making this discovery.

Dr. Charles Mackay, the song-writer, who is an advocate of the secessionists, has come to this country to aid their cause by writing letters to the *London Illustrated News*. We recommend that he write his letters in the light of his own poem *John Littlejohn*. We hope the nature of his errand will be remembered. B.

Bones.— We know of a little fellow, who still wears his apron, who was in the habit of leaving the thin edge-crust of his pie on his plate. His grandmother telling him he ought to eat up and not leave the pieces on his plate, he answered, "Why, grandma, I do n't like to eat *pie-bones*." S. T.

Style of Agassiz.—There is one thing in the style of Agassiz which is a little surprising: we allude to his use, to so large an extent, of Saxon words in preference to those of Greek and Latin origin. This preference is manifested by all great writers who have learned the English language as their mother tongue; but it is unusual to meet with it in foreigners, especially with classical scholars, because it is so much more difficult for them to learn the words of purely English origin than it is to learn those coming from the Greek and Latin. For instance, when a classical scholar meets with the word *inclined*, he knows its meaning from its derivation; but if he comes across the word *slanting*, he must look for its meaning in the dictionary.

It is therefore somewhat surprising to see a foreigner manifesting the preference for old English words which is shown by Agassiz. This is probably attributable to the circumstance that Agassiz's reading of English has been confined principally to the great writers of the language, who always discover that they can express their ideas with more strength, and especially more clearness, in the short and pithy words of the Saxon tongue than they can in the sonorous polysyllables coming from the Greek and Latin. Scientific American.

Oldest Mountains.—All over the world the highest mountains have been raised up since the lower ones. The oldest mountains on this continent are the Capotian, extending in an easterly and westerly direction north of the great lakes. The Apalachian chain is older than that of the Rocky mountains. So in Europe the Alps are newer than those of less elevation. This is what we should have expected if we had reasoned on a sound basis. When the hard crust of the earth was comparatively thin it would yield to a slight force of upheaval; but as it became thicker from the gradual cooling of the globe, it would require a greater force to break it up; and, consequently, the forces accumulated and produced proportionably greater effects. Agassiz, in Scientific American.

A Nameless Nation.—The *Independent* says that in consequence of our lack of a national name the recent Queen's Address to Parliament spoke of us by a name that has never belonged to any government except that of the Mexican States, viz., 'The United States of North America'. U. S. A.—United States of America, without the '*North*'—that is the best name we can claim. We are very generally called Americans; but that name would with equal propriety be given to a Nootka-Sound Indian or a Patagonian, or one from any intermediate part of the continent. Annexation of every thing between Behring's Straits and Terra del Fuego is suggested as a remedy, giving us a right to the name Americans.

F.

Education in Italy.—On the last night of 1861 a census of the Kingdom of Italy was taken. The results are not yet fully known; but it is stated in the 'Evangelical Christendom' that the proportion of persons able to read is nearly as follows: in Lombardy, between 30 and 40 per cent.; in Piedmont, from 20 to 30 per cent.; in Tuscany, from 10 to 20 per cent.; while in the region near Rome not one in a hundred can read. Settembrini, Inspector-General of Public Instruction, reports that in the province of Naples only one child in 1000 gets any school-training. The government is earnestly engaging in the establishment of schools.

F.

BLACKBOARDS.— Judging from the school commissioner's reports, which we are now publishing, the manufacture of blackboards is highly needed in our county. For the benefit of those who intend to make them, we copy from an exchange the following directions for their construction:

"*Composition Blackboard.*— For twenty square-yards of wall take three pecks of masons' putty (white finish), three pecks of clear fine sand, three pecks of ground plaster, and three pounds of lamp-black, mixed with three gallons of alcohol. Lay the mixture evenly and smoothly on the surface to be covered. *Note.*— The alcohol and lamp-black must be well mixed together before they are mixed with the other ingredients.

"*Another.*— To 100 pounds of common mortar add 25 pounds of calcined plaster; to this add twelve papers (of the largest size) of lamp-black. This is to be put on as a skim-coat, one-sixth of an inch thick, on rough plastering, after it has been thoroughly raked and prepared. This should be covered with a coat of paint, made in the following manner: to one quart of spirits add one gill of boiled oil; to this add one of the largest papers of lamp-black, after it has been thoroughly mixed with spirits; to this add one pound of the finest flour of emery. This paint may be also put on boards or canvas. This should be constantly stirred when used, to prevent the emery from settling. If too much oil, or any varnish, be used, the board will become more or less glazed, and unfit for use. Some prefer to have the board behind the teacher green or bronze, which is more grateful to the eye. This can be done by using chrome-green instead of lamp-black. None but the finest flour of emery should be used. Some prefer pulverized pumice-stone to emery. Exchange.

We have used the above, as well as many other compositions, but have yet to find any thing equal to a blackboard of board well seasoned, well jointed, and well fitted to the wall in order to deaden the noise. We advise no one to use the above, as it will not sustain such blackboard practice as ought to be found in every school.—ED.

ARCTIC EXPLORATION.— DR. J. S. HAYES, who sailed from Boston July 7, 1860, on a voyage of exploration in the Arctic seas, reached Boston on his return October 23, 1861. Though the expedition did not accomplish all that was anticipated, in consequence of the death of a large number of the dogs upon whom [which] Dr. HAYES relied for his sledge journeys, yet some advance was made on former expeditions. The most northern known land on the globe was reached May 18, 1861, in latitude 81° 35', or 40 miles north of Dr. Kane's highest position, and taken possession of in the name of the United States. A detailed survey was made of the west coast of North Baffin's Bay, Smith Sound, and Kennedy Channel, embracing about 1300 miles of coast line, and extending north of any previous explorations; besides a detailed survey of Whale Sound and the coasts north and south of it, embracing about 600 miles of coast line. A new channel was discovered opening west from Smith Strait. Dr. Hayes is more firmly convinced of the truth of Dr. Kane's theory of the existence of an open Polar sea, which he hopes yet to be able to demonstrate by the aid of steam-power.

N.Y. Teacher, February, 1862.

The theory of an open Polar sea is not Dr. Kane's theory: that is, it did not originate with him. We first saw it in the *Quarterly*, for September, 1849, in an article written while Kane was a medical student: we believe that the origination of the theory is to be credited to the Russian Admiral Von Wrangell, whose expedition (1820–23) was begun in the year of Kane's birth. The term Polynia, Polynya, or Polynja, which is often used as the name of the Polar Ocean, is of Russian origin. We see that *Appleton's Cyclopedia* says that members of Dr. Kane's expedition reached a point in latitude 82° 27', which is 52 further north than the position spoken of in the item quoted. F.

Repeated Letters — Double Letters.— At the Bureau County Teachers' Institute, in the fall of 1860, it was contended by some, consented to by the rest, and adopted there in practice, that where a letter is repeated in a word, as *l* in *all* and *e* in *been*, we should in spelling orally pronounce the letter twice in stead of calling it a double letter. Thus, a-l-l, all; b-e-e-n, been: not a-double-l, all; b-double-e-n, been. It was insisted that double letters are such as fl, fi, æ, printed in one type. I think the institute right. What say teachers? N. R. E.

What is the difference? Is it any thing more than the difference between tweedledum and tweedledee? If it is, we fail to see it: and, as long as two ways are equally good, we prefer the one most commonly used. A.

Minie.— This word should be printed Minié, unless we consider it anglicized. In either case, however, its proper pronunciation should be preserved, which is represented thus: Min-ee-ā'y. Minié is the name of the French colonel whose experiments have led to the introduction of conoid rifle-bullets within a few years past. We read some times of Minié rifles; but Minié did not invent any rifle: he invented the bullet only, cylindrical, conoid in front and hollow behind, with a cap of thin iron which is expanded by the explosion of the powder so that it fits the grooves of the rifle accurately. F.

Ingham University, N.Y.— This institution, formerly called the LeRoy Female Seminary, and now under the presidency of Dr. S. H. Cox, has been for some years in charge of the Genessee Synod. That body lately returned the property to Mrs. Stanton and Miss Ingham, who originally gave it to the Synod. The reason for the change is "that the financial and general business sagacity and tact of Miss Marietta Ingham surpassed the practical capacity of the entire Synod to successfully conduct the affairs of the institution." Dr. Cox expects to retire from its presidency. F.

The Humming-Birds.— Mr. Gould, an ornithologist, has just published a work on Humming-Birds, in 5 vols. folio. These little beauties are peculiar to this continent, from Terra del Fuego to Nootka Sound. When Mr. Gould began his work, 12 years ago, only 100 species were known: now his work describes 420 species, and the illuminated plates present representations of 360 species; and in many cases pictures of the nest, eggs and botanical accessories accompanying the figure of the bird. F.

Maps or Brains needed.— The *Saturday Review*, spoken of by the *Independent* as 'a leading literary paper, distinguished for its ability and its knowledge', speaks of the Burnside Expedition as having landed on *the west coast of Virginia!* Why need we wonder that the English people do not understand our political affairs when their editors make such enormous geographical blunders? F.

Aged American Writers.— Josiah Quincy is 90 years old; Dr. Eliphalet Nott, 89; Dr. Jeremiah Day, 89; Lyman Beecher, 86; Gulian C. Verplanck and Lewis Cass, 79; John Pierpont, 77; Edward Everett, 68; while Edward Robinson, Dr. Hitchcock, Mrs. Sigourney, H. C. Carey, Schoolcraft, Geo. Ticknor, and R. H. Dana, are between 68 and 75. F.

An Opinion Asked and Given.— The following is sent us for our opinion:

In the sentence 'The Lord has prepared his throne, in heaven'—

1. Is the above a simple or a compound sentence?

2. Is the phrase 'in heaven' a sentence?

3. Is the phrase 'in heaven' *considered* a sentence by any of the standard grammars of this country?

We answer—

1. All grammarians with whose works we are acquainted would call this a simple sentence.

2. We think 'in heaven' is a phrase.

3. We know of no authority which would consider 'in heaven' a sentence. As far as we know, there would be no diversity of opinion among grammars on this point. A.

Pithy Extracts.— The Germans, who so well understand practical education, say "Nothing is so prolific as a little known well." Knowledge increases in a geometrical ratio. The total of the acquisitions of the mind is the continued product rather than the sum of all it contains.

The tasks set to children should be moderate. Over-exertion is hurtful both physically and intellectually, perhaps morally. But it is of the utmost importance that they should be made to fulfill all their tasks correctly and punctually. This will train them for an exact, conscientious discharge of their duties in after life.

There is a whole life-time for the education of the mind, but the body develops in a few years; and, during that time, nothing should be allowed to interfere with its free and healthy growth. Hosmer.

"The Writing Reader" is a new and curious book offered as a school-book, in which the selections are all printed in fac-simile of different hand-writings. The object of the book is to teach youth to read manuscript. F.

Harvard.— Bishop Fitzpatrick was nominated by the Massachusetts Senate as one of the Overseers of Harvard, but declined. F.

New Advertisements.— In our advertising sheet this month will be found an announcement of the *New* Webster's School Dictionaries, and new testimonials in favor of Allen's Primary Geography (of which, by the way, the publishers write us that they have just issued a new and revised edition of 10,000 copies, the first edition being all disposed of); and on the cover an extensive catalogue, with prices, of text-books and other educational and standard works published by A. S. Barnes & Burr, New York, and Geo. Sherwood, Chicago.

Publisher's Notice.— The publisher can no longer furnish complete sets of the *Teacher* for 1862. Subscriptions hereafter received can not begin with any number earlier than May.

LOCAL INTELLIGENCE.

NOTES BY A TRAVELING CORRESPONDENT.—

Mendota.— This town, until recently, was divided into three school-districts. Through the exertions of Mr. Blodgett, who preceded Mr. Heslet, present principal, the people voted to consolidate the districts, and place them under the supervision of the Principal of the Central School. I was surprised to find, however, that the schools were all going on upon the independent system. The people of Mendota can not make their schools what they should be until they place them under one controlling mind.

Mr. Heslet was a pupil of that pioneer in common-school reform, Mr. A. M. Gow, and partakes very much of his preceptor's earnestness. He displays much tact in connecting with his school matters, outside of the general routine, useful and entertaining to his pupils. He has formed the nucleus of an entertaining school-library. I noticed in it such books as Abbott's Juvenile Histories, Bancroft's History of the United States, Irving's works, and Prescott's Histories. In the department for teachers I observed Ogden's work only — a poor pattern in style for a school or a teacher,— crude, loose, containing much bad grammar and worse rhetoric. I would suggest, as among the first of that class to be obtained, Page's and Northend's works, and the 'School-District as it was'; the last a little book that every young teacher should read, and older ones, too, who are in the habit of wearing *sour* faces in the school-room. Lock Amsden also deserves a place in the teacher's library for its useful hints. Mr. H. appoints a committee of critics to report weekly, and connects with his school a *literary society*, which meets every Friday evening. These are cares superadded to a teacher's duties that parents are not apt to appreciate.

Amboy.— Any people is certainly unfortunate that proceeds to build a school-house without first obtaining a well-digested plan, fully adapted to its present and prospective wants. Such was the case here. The grounds are ample, and enough money, it would seem, was expended to erect a commodious and convenient structure. In stead of this, however, the building was badly planned, with a steep, break-neck stairway, and some of the rooms entirely too small. Although it has been built but about four years, the interior, with its bare walls more or less smoked and patches of plastering off here and there, begins to look quite shabby. The furniture seems to have been very well taken care of. I observed that the air in some of the rooms, as we stepped into them, was *close;* but, as I saw no provision for ventilation by lowering the windows, I did not wonder at it. It requires great care on the part of the teacher to keep the air of a crowded room even tolerably pure; and teachers are very apt to forget that, being in the room, they are insensible to the rapid deoxydation of the air. It is a matter of great importance, so great that no parent understanding the subject would, for a day even, risk the health of his child in the impure atmosphere of an ill-ventilated, crowded school-room. And yet, how often it is that hundreds of children, not only for a day, but for days and weeks and months, breathe the slow, deadly poison distilled from their juvenile lungs. I do not wish, however, to be understood to say that the teachers here are negligent in this matter: on the contrary, they

seemed to exercise a good degree of care to keep the windows lowered; but, as the house is constructed, it is simply impossible to secure in all conditions of the atmosphere good ventilation.

I was much pleased with the easy self-possession of Mr. Haller, the Principal. He and his assistants all seemed earnest in their work. I would suggest to Mr. Haller, though, if he can do it without too much cost of time and effort, that he draw the reins a little closer during study-hours. I do not object to the busy hum of industry in the school-room, and would not insist upon what may be termed a *still* room; I like simply a *quiet* room.

Dixon.— I was not in the schools of Dixon enough to form an opinion of them. It is enough to say, however, that they are under the supervision of the Gow brothers. I can not say that the good people of Dixon have entitled themselves to much credit in the erection of school-buildings. I was pleased with the neatness, quietness and apparent good order in both Mr. James Gow's and Mr. A. M. Gow's rooms. My eye was taken, also, with a large number of maps drawn by the pupils and hanging upon the walls of the latter room. It is a pity we can not have the walls of our school-rooms graced with maps, pictures and paintings more than we do. And this reminds me that I observed in Mr. Heslet's room at Mendota a number of framed lithographs of hotels and large machine establishments. This subject of decorating school-rooms is by far too much neglected. What a fine thing it would be to have them embellished with life-like portraits of Washington, LaFayette, Columbus, etc., looking down as silent monitors of the past, inspiring our youth with a reverence for those old worthies, whose memories are too rapidly fading away.

Polo.— The people here, through local prejudices, still persist in separate school-districts. In one of the two districts they have a small building, about half large enough for the number of scholars, and in the other no building at all (which is better), but use the basement of a church. In the latter Mr. J. Page presides, a live man from the 'old Granite State'.

Freeport.— This thriving city has two good school-houses, accommodating about five hundred pupils — not sufficient for all. One of the houses, erected about two years ago, is a fine building — well constructed, well planned, and tolerably well ventilated. It is an honor to Freeport, and is to be credited, I was informed, to the energy and good judgment of Mr. Buckley, a member of the Board. Mr. Tewksbury, Principal of the High School, is a first-class teacher: it is a pleasure to spend an hour in his school.

Rockford.— This is one of the beautiful towns of Illinois, and its inhabitants are blessed with two of the best schools in the state. Mr. Lyon presides over one, and Mr. Freeman over the other. Mr. Lyon is trying a new mode in conducting his public examinations this spring. He decides upon a half-day for a particular *division*, and sends a printed circular to the parents of pupils in that division, inviting their presence. In this way the parents know when their own children are to be examined, and are therefore much more likely to attend. This method avoids much uncertainty and tedium.

Belvidere.— The schools here are doing well. The school-building on the north side is good; that on the south side was built for a past generation. Messrs. Bush and Fox, principals, are earnest and faithful instructors.

Elgin.— This place, I am sorry to say, does not occupy the front rank in liberality toward its public schools. All above the age of *eighteen* are excluded by law. Is there another town in the state that has its records disgraced by such a law?

Mr. Heywood, who has served the people here long and well, is about to leave. He will be missed in Elgin. X.

[We are obliged for the above notices, and hope our correspondent will continue to take notes of the schools of the state, in his travels, and report. Practical observations are always valuable.— Ed. Teacher.]

Peoria.— The citizens of Peoria taxed themselves last year 2½ mills on every dollar's worth of taxable property for the support of their free schools. The amount thus raised proved not quite sufficient to pay all expenses; and their Board of Inspectors, not deeming it for the interest of the community that the completeness and efficiency of the system should be in any degree impaired, recommended and asked for a tax this year of 3 mills. At the election held on the first Monday in April the tax asked for was promptly voted, without opposition.

The city is divided into six school-districts. The system consists of one High School with a principal and two assistant teachers; and a Grammar, an Intermediate and a Primary School in each district. The statistics for the past year are as follows:

Number of teachers — High School, 3; Grammar Schools, 11; Intermediate, 11; Primary, 11: total, 36. Amount paid teachers, $16,124.

Number of pupils —

	Enrolled.				Average.			
	1st Term	2d Term	3d Term	Year.	1st Term	2d Term	3d Term	Year.
High School	97	108	95	97	77	98	80	85
Grammar Schools	436	447	422	435	347	356	339	347
Intermediate "	495	527	517	513	398	425	459	427
Primary "	632	517	615	588	452	415	508	458
Totals	1660	1599	1649	1633	1274	1294	1386	1317

The total amount expended for the support of the schools (salaries and incidental expenses) was $20,085.90; average number of pupils, 1,633; making the average expense for each pupil $12.30. The average cost per pupil in each department for salaries of teachers only in such department was — High School, $22.68; Grammar, $13.94; Intermediate, $6.98; Primary, $5.86.

The foregoing is exclusive of a school for colored children, which was kept up during the year, and in which the number of pupils enrolled was — first term, 28; second term, 23; third term, 18. Salary paid teacher $275.00. N.

Knox County Teachers' Institute was held April 3d, 4th and 5th, at Galesburg.

The President, J. B. Roberts, delivered an opening address which is highly spoken of: the Association requested a copy for publication.

Exercises were conducted — by B. G. Hall, in Mental Arithmetic; by Prof. A. Hurd, in Orthography; by Mrs. R. K. Colby, in Map-Drawing; by Prof. Comstock, in Geography; by W. A. Jones, in Written Arithmetic; by R. B. Guild, in Reading; by A. E. Blunt, in Grammar; by Prof. Dickenson, in Mental Arithmetic; by P. H. Sanford, in Reading; by Prof. Thompson, in Syntax. Discussions were had on most of the foregoing subjects, and on School Government. Essays and

lectures were read — by Prof. Standish, on Normal Teaching, followed by F. M. Bruner with remarks on the same subject; by Mrs. G. A. Tryon, on Primary Teaching; by J. H. Knapp (school commissioner), on History; by Prof. Churchill, on Object-Lessons; by Miss A. E. Smith, on The Ideal and the Real; by Miss Mary West, on The Houses we live in.

President Wallace, of Monmouth College, delivered an address on the evening of the second day.

The following are some of the resolutions adopted:

WHEREAS, many of those formerly associated with us as teachers have responded to the call of their country, and exchanged the peaceful avocations of the school-room for scenes of privation, danger, and conflict: *Resolved*, That we honor their noble patriotism, and that we hold ourselves in readiness to follow them to the battle-field when satisfied that by so doing we can serve our country better than in our present pursuits.

Resolved, That it is the duty of teachers to inculcate patriotism in their pupils: and to this end they should be familiar with the minutiæ of our government and institutions, and make them a part of their constant instruction.

Resolved, That, in the opinion of this Association, studies which are *disciplinary* and *educational* in their character should be taught in our common schools, as well as those that are merely *practical*.

Resolved, That no man is fit to teach school who chews tobacco and spits upon the floor.

Resolved, That our colleges should feel an abiding interest in the primary school, for it is the source 'whence cometh their help'.

Resolved, That it is the duty of every teacher to aid in supporting some educational journal. The *Illinois Teacher*, being the official organ of the State Superintendent, is recommended.

The attendance was very large. The number of members received was about 175, who with a large number of spectators kept the hall constantly crowded. A good degree of interest was kept up during the session, and, taken as a whole, the institute was a decided success, and the best ever held in Knox county.

The next session is to be held at Abingdon some time during the fall of 1862.

[We have condensed the above from the report published in the county papers.]

LEE CO. TEACHERS' INSTITUTE.— The Institute of Lee county met at Lee Centre Monday, March 31, and continued in session until Friday noon following. The programme consisted of exercises in Reading, Writing, Spelling, Geography, Grammar, Composition, Object-Lessons, Drawing, Natural Science, Physiology, and Arithmetic, with discussions of the questions 'How shall we Teach Manners and Morals in School?' and 'How shall the Teacher occupy the time out of school-hours?' These exercises were conducted by members of the institute, and the discussions were very generally participated in by those present.

The evenings of the institute were devoted to lectures on various educational topics. The lecturers were the Rev. Mr. Cooley, Principal of the Dixon Female College; Hon. R. F. Adams, of Amboy; H. G. Loecy, Esq., and Wm. Barge, Esq., both of Dixon. The lectures were highly interesting and instructive, and were, for the most part, of such practical character as to be beneficial to the hearers in their labors in the school-room.

Notwithstanding the inclemency of the weather during most of the session, there was a good attendance of teachers; the sessions were also well attended by the citizens of the village, by whose hospitality the members of the institute were agreeably and generously entertained during their stay among them.

The arrangement of the programme, and the general direction of the institute, were committed to Mr. J. T. Read, the resident member of the Executive Committee, and Principal of the Lee Centre Schools, by whose skill and energy the institute was rendered one of the most pleasant and efficient ever held in the county. A.

Commissioner of Lee County.—We are pleased to note the efficiency of Wm. H. Gardner, Commissioner of Lee county, in carrying on the good work in his county. Mr. G. is endeavoring to raise the standard among teachers, to diffuse a knowledge of the condition of the schools by means of the local press, and thereby stimulate the people to coöperate with teachers and school officers in improving the schools; and also to extend the circulation of the *Teacher*. Mr. G. will accept our thanks for efforts on our behalf.

The Warren Collegiate Institute, located in Warren, Jo Daviess county, Ill., has entered upon its fourth year. The design of this school is to furnish a thorough English education for both sexes, preparing for the high and responsible office of teacher such as intend to pursue that noble calling. Special advantages also will be enjoyed for the prosecution of the Higher Mathematics, Classics, and Music.

The faculty consists of Prof. D. S. Keil, Principal, and Instructor of Mathematics, etc.; Rev. J. F. Probst, Professor of Rhetoric and Ancient Languages; Rev. Chas. Martin, M.D., Professor of Physiology; Prof. C. T. Sisson, Instructor on the Piano-Forte. The summer session opened April 14th, with fair prospects.

J. C. B.

NOTICES OF BOOKS, ETC.

Lippincott's Geographical Series.—

I. Allen's Primary Geography. Quarto. pp. 56. 40 cents.

This is one of the finest books for illustration we have seen. The pictures are charming. Every child with perfect senses would be delighted with it. This book is prepared upon the method of object-lessons, and intended chiefly to teach through the medium of the eye rather than the ear. The maps are beautifullly illustrated to give instruction in Natural History and Physical Geography. We presume, from the character of text, that the book is intended to be suggestive of matter for the use of the teacher, as the style is rather too elevated for that class of pupils usually put into primary geography. Every teacher should have this book in order to get hints which would enable him the better to impart instruction; and every child should have it, if not as a school text-book, at least as one to cultivate and elevate the taste.

II. Not yet issued.

This book is a continuation of the method of object-teaching.

III. Smith's New Geography. Large quarto. 100 maps. Price $1.00. Beautifully illustrated.

This is an admirable and very complete work, and is worthy of adoption, not only in the school-room, but as a book of reference for the general reader. See advertisement.

Teacher and Pupil's Friend.—

This is the title of a neat semi-monthly, published in Chicago, and edited by John Atwater. Price for six months 50 cents. We welcome this new auxiliary to the field of educational labor. There is room for all laborers, for there is much work to be done.

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UNION GRADED SCHOOLS.—NUMBER II.

[IT will be seen by referring to the February number of the *Teacher* that a series of articles was promised upon the subject of Union Graded Schools. Owing to sickness, we have been unable to continue the subject until the present time.—A. M. G.]

IN constructing any system of operations where large numbers of individuals are concerned, there are four important ideas to be borne in mind: the work to be done, and economy of time, of labor, and of money, in accomplishing it. These ideas are admirably illustrated in some of our large machine-shops, where division of labor is carried to a great extent. A locomotive engine is a creation of wonderful skill and power. We are astonished at its power, its magnitude, its elegance, its accuracy, its finish, its admirable adaptation. It is not the result of one man's mental or physical labor; it is the grand result, the sum-total, of the mental and physical efforts of many men, working harmoniously for its construction. It would be physically impossible that a man, or a set of men, could produce so grand a machine, so admirably constructed, and at such a price as would justify its purchase, if each piece of its complicated machinery was made separately and by the same hands. There must be an extreme division and subdivision of labor to produce such works, in order to save time, labor, and money; otherwise they could not be made and used. It is worth the time to visit one of these immense establishments, to see the system, the order, the accuracy and the harmony which prevail in each of its departments —each operation simple in itself, yet all combining to effect a common purpose, making in the arrangement of the whole establishment a man-machine as complex as the locomotive itself. It is evident, in all the haste and noise and confusion, that there is in the whole an order and a system not observable at a single glance. To understand

the operations of one of these monster shops in detail would require close, careful, studious observation bestowed for a considerable length of time. The operations are too complex to be understood by a casual inspection: they must be understood, if understood at all, by long-continued application and practice.

There are many parties concerned in this vast work. We will briefly enumerate enough for our illustration. First, there are the *stockholders*—men who invest their means in building these large establishments in order to increase their wealth. Without large accumulations of capital such works would be impossible; and each capitalist is interested in the work in proportion to the amount of stock invested. It is impossible in the nature of things that each stockholder can have a personal supervision of the establishment, having neither time, taste nor talent for such a work; but, as such vast interests require the most careful supervision and scrutiny in order that they may be made to realize a per cent. on the investment, it is deemed wise to choose certain persons of acknowledged ability to look after the interests of the company. These, when elected, are the representatives of the capitalists and constitute the board of trust, and are responsible for the duties imposed upon them. These are the financial managers, of whom one is usually chosen chief or president. But, as the duties of the board are chiefly of a financial character, it is necessary that they select some one who will devote himself to the supervision of the mechanical department of the enterprise. It is he who will select the materials used in the several departments, and apply the funds appropriated by the board to carry on the work. He would be selected for the general knowledge he possesses of the various departments and the details necessary for each, for his business tact and energy, and for his ability to select suitable persons to accomplish the details. The larger the establishment, the greater the subdivision of the labor. We will suppose a foundry to supply the castings, a smithery to furnish the wrought-iron portion, a wood-shop to prepare the wood-work of the cars, the paint- and finishing-shop for the embellishments. Each of these departments has its specific work to do; each in succession is dependent on the other, and all combine to make the desired machine. Each department must, then, have its leading, controlling mind: there must be a systematic arrangement in the foundry, the smith-shop, the wood-shop, and the finishing-rooms,—systems, as working parts of a great systematic whole. A master-workman must preside over each department of labor, having supervision over the subordinates in his department and yet responsible for all the work of his branch to the general superintendent. Here, then, we have a succession of responsible parties, more or less subordinate, as their specific duties demand. Any

neglect or maladministration in any of the departments is felt sensibly throughout the whole establishment. The company must provide the means when needed; the board must direct in their application; the chief workman must see that the materials are on hand and of suitable character; the under 'bosses' must see to it that the workmen are prompt, efficient, steady, making good use of their time and tools.

Another condition of success is the suitableness and convenience of the buildings and the tools necessary. The time of the workmen is the money of the employers. If the employers do not afford good tools they ought not to expect good work. Every thing that facilitates labor and production should be made available, nor should an unfavorable estimate be made of any workman who is impeded in his efforts by being compelled to work to disadvantage. All the improvements in machinery should be introduced into such establishments. The economy of time and of labor is the saving of money. Labor-saving inventions are sought with eagerness by all who understand the principles of political economy in production. Buildings should be constructed with special reference to the use to be made of them. Experience has demonstrated certain forms of building as most suitable for certain kinds of labor. In the several departments exhibited in establishments for the construction of locomotive engines we find the buildings adapted to the work: the foundry, the smith-shop, the wood-shop, and the finishing-room, are all constructed on different principles, each with special reference to the use to be made of it. Light, heat, ventilation, convenience of ingress and egress, size, and general adaptation to the necessities of the work, must be taken into consideration. Any radical defect in construction of buildings causes inconvenience and loss of time, which to the company is a loss of money.

That such an establishment may be a success, there are certain general conditions that must be carefully observed. There must be a demand for the article or articles to be produced: there must be capital ready for the investment, and in sufficient amount; discreet directors of the enterprise, who erect the buildings, apply the funds, and exercise a general supervision over the concern: there must be an experienced, practiced, practical head to execute the wishes of the directors, and under him must be the best workmen in the several departments that can be found. When these conditions are complied with and the materials are furnished the establishment is in complete working order: nothing is needed but that each individual will do his duty in his department, and it will be a success.

That there is a striking adaptation of these principles to the correct working of the Union Graded School may be seen in our subsequent articles upon this subject.

DUTIES AND RESPONSIBILITIES OF THE TEACHER.*

MR. PRESIDENT, LADIES, AND GENTLEMEN:

Through your kindness, and in obedience to your invitation, I have the pleasure of addressing you, and particularly the pleasure of addressing so many members of that profession which, in the scale of professions, ranks inferior to none. And I now ask your indulgence for such length of time as will enable me to submit a few thoughts and suggestions to your favorable consideration, concerning the duties and responsibilities of a profession upon the proper appreciation, due performance and encouragement of which depend, in a great degree, the future prosperity, welfare and permanency of the political, civil, religious and educational institutions of our common country.

The teacher's calling is preëminently one of confidence, trust, and responsibility. In theory, it calls into action all the faculties of the human mind; and in its practice, it exerts the cardinal virtues of the human heart. It is not my purpose, however, to elevate this above, nor to degrade it below, but simply to place it on an equality with, the other learned professions, where, in my judgment, it justly and meritoriously belongs. Strictly speaking, I presume no one profession can be superior in respectability to another; for the reason that all honest occupations are, in the abstract at least, equally respectable, because equally necessary and useful. If, however, there is any difference in this respect between the various professions, it is attributable not to the professions themselves, but to the manner in which their respective duties are performed; because if the duties of all were equally well discharged, then, indeed, would all be equally honorable and respectable. Admitting the truth of these propositions—conceding the utility and respectability of the medical profession, and readily acquiescing in and acknowledging the indispensable necessity of that profession the function of whose high and holy offices is to cultivate the moral and religious sentiments of the people and to administer the balm of consolation to the afflicted soul in the hour of trouble and of mental anguish,—there are those who, sneeringly, contemptuously, and with an air of triumph, inquire Of what use is the legal profession, and of what benefit the lawyer? Is his profession honorable? In reply to these interrogatories, and in vindication of a profession of which I now have the honor to be a humble member, my answer is that the

* Address of WM. BARGE, Esq., of Dixon, before the Lee County Institute, at Lee Centre, April 3d, 1862.

profession of law is not only highly useful, but highly honorable and respectable. It has embraced, and now embraces, in its membership some of the purest characters and mightiest intellects this world has ever produced. The names of Jefferson and Adams, of Marshall and Jay, of Kent and Story, of Webster and Clay,—this galaxy of illustrious memories which adorns the pages of our national jurisprudence would of itself give character and respectability to any department of human labor. Its members are consulted by men in trouble: not such trouble as religion can solace or medicine cure, but trouble arising from innocence accused, liberty assailed, confidence betrayed, property invaded, reputation slandered, the domestic relations violated, or life endangered. The innocent and the guilty, the wronging and the wronged, the honest and the dishonest, the high and the low, the rich and the poor, the dupe and the knave, all consult the lawyer, and that, too, with the same unreserved, implicit confidence. This, then, of itself, ought to be a complete refutation to the imputation so unjustly cast upon this noble profession.

And equally respectable and worthy of commendation, though seriously doubted by some, is the important business of those whose peculiar privilege it is to instruct the rising generation in the ways of wisdom and morality; to plant the seeds of knowledge in the minds of those who, in a few short years, will become the rulers of this great nation; to instruct them in the principles of morality and virtue, as well as in the principles of literature and science; to create in their minds a thirst for knowledge and an aspiration to become learned in all the mysteries of science; to instill into their youthful hearts a love for truth, and a determination to so wage the rugged warfare of life as to win for themselves an honorable and imperishable fame; to induce them to imitate the example of the great and good in every thing worthy of imitation, and to shun vice in all its forms; to teach them to be true to their friends, loving to their parents, obedient to their teachers, honest in business, faithful to their country, and loyal to the constitution; and to infuse into the hearts of our American youth as pure a patriotism as ever animated a human soul, and to make them good citizens as well as good scholars. These are a few of the teacher's duties: it would be impossible for me to enumerate them all. And we may well exclaim Who is sufficient for these things? Let no one enter this profession as a sinecure: let no one enter it as a stepping-stone to something higher. There should be, there is, nothing higher. Let those who select this profession remember that labor—hard, unceasing labor—is the indispensable condition to professional eminence and success.

The qualifications, like the duties, of the teacher are variously estimated and differently defined. With some, Reading, Writing, Arithmetic, and a physical ability to flog, constitute the standard of qualification, and in their opinion any person is sufficiently qualified to teach school; while with others, and the larger and more intelligent portion of community, his qualifications consist in a thorough education, a profound knowledge of human nature, thoroughly developed powers of persuasion — sufficiently strong, at any rate, to enable him to manage the most refractory scholar and to keep the most perfect order in his school without the use of coërcive measures or the application of Solomon's whip. They are as much opposed to coërcion in school as the secessionists are to coërcion in government, and as much abhor the teacher's rod as the rebels do the President's cannon. They conceive it to be the duty of the teacher to manage and control all the members of his school without resorting to compulsatory measures. It would be very desirable to be able to govern a school in this way; but it can not be done. It will do very well in theory, but it will not do in practice. If parents can not govern their children at home in this way, how do they expect a teacher to do it? In stead of complaining, as they often do, at the treatment which their children receive at school, they should teach them to be obedient and to comply with all the rules and regulations laid down by their instructor; and in that case there would not be so many complaints laid in at home, nor so many scholars punished for misconduct at school. But do not understand me as being an advocate of pummeling and constant flogging. On the contrary, I abhor and condemn both. But in those cases where a resort to mild treatment has failed, where reason, argument and persuasion have been used without producing the desired effect, then, I say, fearless of successful contradiction, that the teacher who reserves the rod, under such circumstances, is a moral coward and unworthy the position which he occupies.

Let my child alone! exclaims the deluded parent; and if you do n't, I will take him out of school. And just let us alone! cried our deluded countrymen of the South, while robbing our mints, plundering our custom-houses, capturing our vessels, interrupting our commerce upon the Mississippi river, stealing our public property, retaining our arms, appropriating the public revenue to their rebellious purposes, and raising the arm of rebellion against a government that has done them no wrong; and if you do n't let us alone, we will secede from the Union and abandon the government of our fathers. This is secession in the former case, under the familiar term of 'taking children out of school because they do n't like their teacher'; and treason, secession,

and rebellion, in the latter case. When parents remove their children from school without sufficient cause or provocation, when they withdraw them for slight and transient causes, they encourage in them a spirit of rebellion and insubordination which, should it become general among the youthful population of our country, and be permitted to go unrestrained, may result in the total subversion of all parental authority, in the usurpation of the teacher's lawful and legitimate rights, and again inaugurate such an internecine, servile, insurrectionary war as now threatens to lay the proud fabric of free government smouldering in the dust, and deluge our fair land in fraternal blood.

But I am some times told that by refusing to withdraw children from school when the child is apparently in the right and the teacher in the wrong the child must suffer cruelty and oppression for which there is no remedy. Not at all. It is the parent's duty in such cases to visit the teacher, not in a spirit of fault-finding or revenge, but with a desire to ascertain the facts in the case, and to obtain, in the event of his child's being in the right and the teacher in the wrong, satisfactory assurance that the rights of his child will be respected; and failing in this, it is then his duty to present the whole matter to the directors, whose business it will then be to examine the conduct of the teacher and of the child, and should such examination result in the conviction of the teacher, to discharge him from school. But should the parent fail, through either or both of the methods just enumerated, to obtain the redress of all the injuries inflicted upon his child in school, there will still remain for him the power of securing the teacher's removal from school by effecting through the ballot-box a reörganization and complete change of the board of directors. Hence you see he has the same final remedy that the rebels have for the redress of any wrong in the administration of the government: each is finally through the power of the ballot-box. No injury can be inflicted upon the person or character of the child in school for which there is no lawful and efficient remedy: nor can any wrong be perpetrated upon the people of any section of this country for which the Constitution of the United States does not provide adequate redress. No imaginary wrong, or fancied intrusion upon their reserved rights, no contemplated injury — present or future, fancied or real — can palliate the crime of the secessionists in emulating the wretchedness and venality of the ungovernable Mexicans, and in instituting a war which for cruelty and barbarous atrocity will stand unparalleled on the pages of civilized warfare, and which may yet terminate in the desolation of our fair fields and fertile lands.

Even under the present administration, and with all their fears of

its intervention with their domestic institutions, having, as they had, with the certain coöperation of the conservative men of all parties, a majority in both branches of Congress against the President, they were, had they remained at their posts and discharged their duties like men of honor, perfectly safe in the Union, but very unsafe out of it; because any President is powerless with Congress against him: he can make no law unless first enacted by that body; he can make no treaty unless confirmed by two-thirds of the Senate; he can make no appointment without Senatorial confirmation; nor can he draw a dollar from the public coffers without an appropriation by Congress. No increase of revenue, no imposition of taxes, no acquisition of territory either in the North or in the South, no Congressional exclusion of slavery from the public domain, no interference with that institution in the states where it now exists, no injury to their persons or their property, to their social relations or domestic affairs, could possibly have been perpetrated upon the southern people without receiving the approving sanction of their statesmen in Congress, had they not abandoned their seats in Congress. Besides, the constant fluctuation of public sentiment, and the generosity and liberality with which the highest honors in the gift of the American people have been conferred upon southern men, ought to have been a sufficient guaranty of success to them for placing their catalogue of grievances once more before the people, and again asking them to redress their wrongs and elect a man in whom they had more confidence as the next ruler of the nation.

My faith in the power and efficacy of the constitution and the laws, and my confidence in the integrity and loyalty of the American people, is of sufficient strength to warrant me in believing that equal and exact justice to all sections, men, and parties, can and will be done, through the ballot-box, at our popular elections. But, notwithstanding all this, failing to obtain and keep the uninterrupted control of the governmental affairs of the nation, they now demand the separation of the old government, and the formation of a new confederacy, whose honors and emoluments shall for ever be under their exclusive control and subservient to their wishes. This they expect to accomplish by secession.

So with schools. Those parents of whom I have been speaking, becoming dissatisfied with the course of treatment which their children — whether justly or unjustly it is immaterial for the purposes of this argument — have received at the hands of their instructors at school, file their bill of complaint with the board of directors against the teacher, and not unfrequently demand his instant and uncondi-

tional removal from the position which, in their heated imaginations, he has so basely desecrated by the infliction of cruel and unreasonable punishment upon their children; but failing to convince the official board of the truth of their complaints or the enormity of the outrage, or to convince the teacher, in an interview which they seldom seek with him, of the error of his ways and to induce him to turn therefrom, they then resort to the practice I most emphatically condemn: I mean the practice of taking their children from school. This is done, too, with the fond hope of producing a schism in the public sentiment of the district, by which others will be persuaded to follow their pernicious example and remove their children too, and in this way effect a temporary discontinuance of the school. They frequently desert the teacher of their own choice, in his hour of trouble, by diminishing the number of his pupils to such an extent as to render the continuance of his school an onerous burden and expense to those who remain faithful to the educational welfare of their children.

Under the School-Law of 1849, which imposed the whole burden of supporting the schools, after the exhaustion of the small amount of public funds, upon the shoulders of those parents whose children remained in attendance, this evil existed to a much greater extent than it now does, under the present law, which gives directors no control over any school not exclusively free, and confers upon them power to defray all school-expenses by an equal and uniform system of taxation. I have known instances, since I became a citizen of Illinois, where directors, acting under and by authority of the Law of 1849, and at the unanimous request of the majority of the people in their respective districts, employed teachers for a short time, and appropriated all the government money in their possession to the payment of the teachers' salaries. The schools commenced under favorable auspices and with a large number of scholars; but, before any considerable portion of the term had expired, discontent arose among the pupils, and many of the parents became dissatisfied and withdrew their children from school, thus leaving the entire balance, which was the larger part, of the teacher's salary, to be paid by the remaining few.

I firmly believe, fellow citizens, that if ever the public schools of the United States cease to exist, or if existing at all fail to accomplish the object and purposes for which they were created by the founders of this government, the main cause of their overthrow or of their failure will be found in the irregular attendance of their members. Scholars, parents, and teachers, then, are jointly responsible for the perpetuity of these institutions. When directors purchase fuel, furnish rooms, and employ teachers, for the comfort, accommodation and in-

struction of fifty scholars, at an annual expense of one thousand dollars to the district, and before half the term is gone one-half the pupils withdraw from school, thus increasing the annual cost of instruction per scholar from twenty to more than forty dollars, you will then hear grumbling and growling among the tax-payers, particularly those who have no children of their own to educate, and a united demand from this class of our population for the abolition of our public schools and the establishment and encouragement of private and select schools. This dollar argument in support of or in opposition to any system of instruction is a powerful one in these times of financial embarrassment. Let the enemies of free schools once become armed with this weapon of destruction and the disposition to use it, and you may tremble for the safety of your graded schools. On the contrary, keep them disarmed, deprive them of this argument, so touching to the pockets if not to the sensibilities of the people, and our system of public instruction is permanently established, and placed beyond the possibility of destruction for all time to come. Never was there a time since the organization of this government or in the history of this republic when the cause of popular education was more imperiled, or the activity of its advocates and the energetic coöperation of its friends so indispensably necessary to its future salvation, as the present. Let us stand firm, and uphold and defend our free schools in this hour of their peril, and transmit them to future generations as the greatest blessing ever inherited by a free and intelligent people.

Another serious evil in schools — one against which the teacher is constantly contending, one that has its parallel in the organization of civil government, and one that is sapping and undermining the foundations of our political structure — is known in school as resistance to the rules and regulations of the school-room, and in government by the obnoxious but appropriate appellation of nullification. In the former this is produced by pupils dissatisfied with the rules and regulations of their school, unwilling to leave, but setting at defiance all rules and regulations not in conformity with their peculiar notions of school-government, and, either alone or through combination with others, resisting their execution and enforcement; but when these rules meet their approbation, then they demand a rigid observance of them at the hands of others, and complain most bitterly if it is not promptly and readily yielded. In the latter — the government, I mean, — it is caused by a disposition on the part of those who, failing to rule, are determined to ruin the government; who, contented and obedient when in power, are restive when under the constitutional restraints of a minority. I have no respect for the scholar who, liking the rules

and regulations of his school, obeys them, but disliking, violates them; nor have I any sympathy for the man who claims obedience to the laws enacted by Congress when by the fortunes of politics his party is placed in the ascendency, but who refuses that obedience when from the same cause his political status is reversed. Such a man has neither patriotism nor common honesty.

Our children should be taught that their duty to obey does not cease with their minority. They should be taught that they live in a land of *regulated* liberty, and under a government made and administered by the people, whose will, when authoritatively expressed, is law; that our government comes from the people, who are the rightful sovereigns and legitimate source of all power, and is founded upon their patriotism, intelligence, virtue, and discriminating justice, in opposition to the British theory, which recognizes the king as the fountain-source of all power, and considers him incapable of doing any wrong; and that our trust is in the *people*, and not in *kings*. They should be taught to believe in the capability of man for self-government, in the right of the people to make their own laws and to say who shall rule over them. They should be taught that in every representative democracy, like our own, the majority of the people, acting under their constitutional restraints and prohibitions and within the safeguards so wisely thrown around the rights and privileges of the minority, *should* and *must* of necessity rule; that, so far as the minority are concerned, it is immaterial whether the laws enacted by the majority meet their approbation or disapprobation, whether they like or dislike the individual whom the majority has selected as the chief magistrate or executive of the nation, they are bound, as loyal citizens and as honest men, to render prompt obedience to those laws, so long as they remain upon the statutes of Congress and are decided by the Supreme Court to be in conformity with the provisions of the Constitution of the United States; they are bound to obey the President during his constitutional term of office.

The Constitution of the United States, the laws and treaties made in pursuance thereof, being the supreme law of the land, every person is under the most imperative obligation to yield implicit obedience thereto; for if a man's conscience be the recognized criterion of his duty and fealty to his government, in opposition to the decisions of courts and the enactments of Congress, there is at once an end to the stability and efficacy of all popular government. Confusion and anarchy are the inevitable consequences of this dogma. If one man may with impunity set at defiance the law for the rendition of fugitive slaves, another may evade the revenue law, and another violate the

law interdicting the African slave-trade; and so on, each sitting in judgment upon his own case, deciding for himself, and invariably founding his decision upon personal considerations and selfish motives. Never was there a more fatal and dangerous political heresy enunciated by man; and to sanction such a theory would be to make life, liberty and reputation insecure, and prove the whole system of popular government a fallacy and a cheat, and demonstrate to the enemies of constitutional freedom that man is incapable of self-government.

Had these few fundamental constitutional truths been inculcated into the youthful mind, both at home and at school, and had these important principles been (as they undoubtedly would have been had they been taught in early childhood) the rule of practice with our lawmakers, ancient and modern, history would then have furnished no record of puritanical expulsion from their native land, nor of religious intolerance and unholy proscription for opinion's sake, either in the old world or in the new. And had the young been educated to render that obedience to the rules of home and the regulations of school that is due from the child to his parent and from the scholar to his instructor, and had that regard and fidelity been paid to the constitution and laws of our country that are due from every citizen to the government of his choice, the fair page of our national history—the pride of America and the admiration of the world—would not have been sullied by a Shay's rebellion or a Whisky insurrection, a Virginia invasion, or a civil war which now arrays father against son and brother against brother on the field of deadly conflict, in this fearful struggle for national existence and constitutional government.

This trouble might have been avoided by simply teaching the constitution as the fathers made it. But this having been neglected in some portions of our country, we now find our nation in war: a war which, however humanely and discreetly managed, will be a serious and constant drain upon the life of our government. Our country will feel the effects of these conflicts many long years after this cruel rebellion is crushed to the earth. During the progress of the war our commerce will be curtailed; our manufactures stopped; our agricultural interests embarrassed; our finances deranged; many of our institutions of learning suspended; our schools discontinued; business of every kind prostrated; our public indebtedness augmented; millions of treasure spent; thousands of fortunes blasted; many precious lives sacrificed upon the altar of their country; our young men cut down in the morning of life; our fathers and our sons, our husbands and our friends, left in their gore upon the field of death, with no friendly hand to soothe their pain; thousands of homes made desolate, and many a

gentle bosom made to heave with sorrow that no human sympathy can assuage. The wrecks will lie thick around us, and the charred and battered ruins of high hopes and brilliant achievements will tell, in a manner never to be forgotten, how severe is the trial through which we are now forced to pass as a consequence of the failure to teach the constitution and its supremacy to the youth of our country.

With all this around and before you, teachers, how many of you now teach the constitution in your schools? I have known teachers who never read its provisions. And yet we have an army of six hundred thousand men in the field to-day to uphold and defend it. In the language of the great statesman and illustrious dead, it is your duty to teach your pupils "to obey the laws and uphold the Constitution of the United States". Teach them to stand by and defend the flag that knows no defeat; to preserve the Union cemented by the blood of our ancestors — that Union which has so long united us as one great people, which has secured to us peace, prosperity and happiness, which has so highly elevated us in the scale of nations, and caused our flag to be honored and respected by every nation upon the face of God's earth,—as a priceless inheritance to themselves and their posterity. Teach them to remember that

> "What God in his wisdom and mercy designed
> And armed with his weapons of thunder,
> Not all the earth's despots and factions combined
> Have the power to conquer or sunder.
> The union of lakes, the union of lands,
> The union of states none can sever:
> The union of hearts, the union of hands,
> And the Flag of our Union for ever!"

COMPOSITION-WRITING.—NUMBER IV.

ALLOW me at the outset to correct a probable misconception. From the title of these articles it might be inferred that it is the intention to develop a complete theory of Composition, *ab origine ad finem;* whereas the chief object, as stated in the first paper, is to set forth plans by which the aversion of learners to the exercise may be overcome, by making it as varied and interesting as possible. As soon, therefore, as we have shown how this has been done in our own school our task is accomplished: in other words, we are amusing beginners, not instructing advanced classes.

In the last two articles we exhibited the method of 'composition made easy' by presenting for the pupil's imitation models written out *in extenso* on the blackboard. This, it will be found, is profitable, not only to mere tyros, but to many older scholars of higher pretensions; for every experienced teacher knows there is a woeful lack of elementary culture in some schools and among the largest pupils — who, by the way, are extremely fastidious in regard to learning any thing *primary*, even though they know nothing about it. This model system on the board may be practiced for weeks or months, until the class are all perfectly familiar with the various points required in the preparation of a simple essay, viz: punctuation, embracing merely the use of the period and comma; the use of capitals; neatness in writing; proper location of the title, date, and name; ordinary care in composing. This stage reached, the model may be dispensed with, and the class henceforth taught by hints and explanations. At this period many teachers, we suppose, would introduce some elementary work on the subject, as 'Quackenbos's First Lessons'; but as yet we have seen no treatise for beginners that realizes the real desideratum in this department. What the pupil needs is not Rhetoric simplified, Personification and Hyperbole reduced to the juvenile comprehension; but a manual full of such patterns, hints, and natural arrangement, that the scholar will acquire the facility of writing without knowing it. These nursery compends of formal rules gathered from larger works, these infantile Whatelics, are not to our liking. Until the learner, therefore, is old enough to study some of the standard text-books on the subject, we prefer to continue the oral instructions of the living teacher.

As to our mode of dealing with students at this point of advancement, we subjoin a few suggestions. As we copy from our school journal, the different paragraphs may appear disjointed.

In giving a subject to a single scholar or to a class, be certain that it is adapted to their comprehension. If difficult, make suitable explanations; or before doing so you might ask How would you treat this? and if it is found that their conceptions are erroneous, it is very easy to set them right.

In giving the same topic or similar ones to the class, the teacher might occasionally afford valuable aid by writing a skeleton on the board, which the class can copy and thus go to work more confidently.

Relate some historic incident, or some occurrence in nature or art, or any thing striking that may attract their attention, and afterward require them to report the same in their own language. In this way: "Scholars, I am going to tell you a story, and I wish you to listen attentively, as after I am through you are to bring all you can remem-

ber for a composition the next time." Then, for instance, give them the life of Lafayette, without disclosing the name, asking that, besides writing what you related, they find out additional facts from their parents, as well as discover who the individual is.

When the day arrives for announcing the subject, call the class around you and talk familiarly about whatever you have determined to choose, drawing out their knowledge and exciting their interest, but without previously informing them that the topic under discussion is to be the next theme. After the idea has been fully illustrated by copious remark and anecdote from teacher and pupil, say "Now, class, you all seem to know a good deal about Fruit: suppose our next composition be about it." W. W. D.

STERLING, April, 1862.

THE PICKET GUARD.

BY J. L. RAND.

THE sentinel sounds the dread note that alarms;
Each man springs up from his sleep to arms!
There 's an onward dash
And a sudden flash;
There 's a sigh and a groan,
And the quick feet have flown:
A picket is dying alone.
For men must fight for the sleeping Right,
And who can stop to reckon?

The newspaper tells what the President thought,
What Stanton did or Seward taught,
In columns long,
With capitals strong;
And the paper is filled
As the editor willed:
"SLIGHT SKIRMISH! — one man killed."
But men must fight for the sleeping Right,
And who can stop to reckon?

A wife sits sad in her fireside chair,
And thinks of the husband so brave to dare,
And dreams once more
That the war is o'er;
While the South-birds trill
Near the picket-camp still,
And the picket lies dead on the hill.
For men must fight for the sleeping Right,
And God stands by to reckon. Continental Monthly.

GOOD CHEER.

THE *theory* of teaching is often so rose-colored and covered with the flowers of imagination as to deceive the inexperienced; yet some times real flowers, of God's own planting, do spring up in the teacher's rugged path, to make glad the heart. A little incident once came under my own observation which yielded a most pleasant fragrance.

Mary was a bright, passionate, proud-spirited girl, who had a great antipathy to James, a low, teasing boy in the same school—a common school. Many were the little brushes they had; and one day, after school, the evil propensities of both were at maximum, and a terrible collision was the result. Names were called, threats made, and even stones thrown, until the teacher, going to the door, spoke to them calmly, but with deep feeling:

"James, this must be stopped, and do you go immediately home; and Mary, I have talked to you often, I can do nothing more but pray for you."

This quelled the tumult: the little bystanders began to disperse, and the teacher went into the school-room again to finish 'putting things to rights' before going home.

After some time Mary came in alone, stood a few minutes silent, and then, bursting into tears, confessed her fault, told how her quick temper was a continual plague to her, and begged forgiveness for her late exhibition of it. "When you said you would pray for me, Miss N., I could not stand that." she sobbed. Then gladly the teacher poured into her softened heart gentle reproof and loving counsel, binding it fast to her own with a firm, new bond. It must be added that Mary had a lovely Christian mother, the teacher's most certain reliance.

Another pleasant incident:

A little girl, in playing around the school-yard, lost a shawl-pin. She was distressed about it, because it was her mother's; and obtained permission for herself and another little girl to stay out after recess and hunt for it. It was some time before they came in. After school they lingered, and in explanation of their staying one of them said "Miss N., Mamie and I have a secret to tell you." When the others were gone the teacher asked "Well, Edith, what is your secret?" "Why, Mamie and I hunted a long time for the pin and could n't find it; so we went and prayed to God to help us find it, and then we found it right away." The words and manner were so artless and full of child-like faith and joy that it was delightful to the weary teacher, and helped her on for many a mile. F.

HOW DOES A FLY WALK ON THE CEILING?

THE pious Derham, in his 'Physico-Theology', said that "divers flies and other insects, besides their sharp-hooked nails, have also skinny palms to their feet, to enable them to stick to glass and other smoother bodies, by means of the pressure of the atmosphere, after the manner I have seen boys carry heavy stones, with only a wet piece of leather clapped on the top of a stone."

This eminent divine and philosopher, who was born in 1657 and who died in 1735, was a member of the Royal Society of London, and contributed to its volumes between 1697 and 1736 more than forty papers on scientific subjects. He also published, besides his 'Physico-Theology', two other works, entitled 'Astro-Theology' and 'Christo-Theology'. The popularity of Dr. Derham's works, and his great reputation as a philosopher, has no doubt been the reason why Derham's answer to the question placed at the head of this article has been so extensively circulated and so generally received.

Pearl, who is the author of the article 'How a Fly Walks on the Ceiling' in McGuffey's New Eclectic Fourth Reader, says " . . you will observe that the leg is hollow, for there is a line of light running up the middle of it, which you can easily perceive. At the foot you can distinctly observe a flap or membrane, to which are attached two points, one in front and the other behind. These the fly can move at pleasure, and can extend or contract the flap just as it pleases.

"When Mr. Fly, then, wishes to pay a visit of ceremony to a distinguished acquaintance, or to move with gravity around his fair one, without the trouble of raising himself in the air, he stretches out these points, tightens the flap, draws the air from under it, and moves along the polished surface of the glass with as much ease and security as you can on the broad gravel-walk in the garden."

Some years ago, when deliberating on the vacuum theory, I placed a fly in the receiver of an air-pump, and exhausted the air. The fly was still able to adhere firmly to the upper part of the receiver with its back downward. This experiment I have repeated many times with like results. Although not an *experimentum crucis*, still it suggested to my mind the possibility of the fallacy of the atmospheric-pressure theory. On examining the subject, I found that Dr. Power in his 'Experimental Philosophy', published (1664) nearly two hundred years ago, said "The fly is provided with six legs and walks on four. The two foremost she uses as hands, wherewith to wipe her mouth

and nose and take up what she eats: her other four feet are cloven and armed with little claws, by which she fastens on rugosities and asperities of all bodies, like a catamount. She is also furnished with a white viscous liquid squeezed out at pleasure to glew herself to the surface."

It is the opinion of Mr. Blackwall, a recent observer, that the apparatus by which flies sustain themselves contrary to gravity is "mechanical and closely analogous to the pulvilli or fine hair brushes of other insects used as holders or supporters." He also tried the experiment with the air-pump, with the same result as related above. He says that a fly enfeebled by cold, or other causes, climbed with difficulty the sides of a glass ascended before with perfect ease; and that flies unable to stand back downward on highly-polished bodies were able to do so on those slightly soiled.

It seems that the fact that flies climb with difficulty when enfeebled by cold is equally explainable by Derham's or Blackwall's theory. Bingley, in citing Derham's opinion, says that flies "are able easily to overcome the pressure of the air in warm weather, when they are brisk and alert: but toward the end of the year this resistance becomes too mighty for their diminished strength, and we see flies laboring along and lugging their feet on windows, as if they stuck fast to the glass; and it is with the utmost difficulty they can draw one foot after another, and disengage their hollow cups from the slippery surface."

Hooke (1635–1702), who was a contemporary of Derham and one of the earliest of microscopic observers, "described the two palms, patterns, or sole (as he calls the pulvilli), as beset underneath with bristles or tenters, like the wire-teeth of a card for working wool, which, having a contrary direction to the claws, and both pulling different ways, if there be any irregularity or yielding in the surface of a body, enables the fly to suspend himself very firmly. He supposed the most perfectly polished glass presented such irregularities, and that, moreover, it was always covered with a smoky tarnish, into which the hairs of the foot penetrate."

Gosse, in his 'Evenings at the Microscope', says Hooke's 'smoky tarnish' is altogether gratuitous, and that Blackwall, after finding "that flies can not walk up glass which is made moist by breathing upon it, or which is thinly coated with oil or flour, was led to the conclusion that the pulvilli are in fact tubular, and excrete a viscid fluid, by means of which they adhere to dry polished surfaces; and on close inspection, with an adequate magnifying power, he was always able to discover traces of the adhesive material on the track on the back of the glass, both of flies and various other insects furnished with pulvilli, and of those spiders which possess a similar faculty."

It seems, then, that Power's theory, which is about the same as that adopted by Blackwall and accepted by Gosse, is the one that should supplant Derham's until a better-proved one takes *its* place.

LEBANON, O., April 28, 1862. W. D. HENKLE.

BE ALWAYS BEFOREHAND.

IT is an important element of success in life to acquire *the habit of being beforehand with whatever you undertake.* I can, perhaps, best illustrate what I mean by an example taken from another branch of the subject. There are two friends, gentlemen of large means, whose estates and whose annual incomes are about equal. One of these is always short of money; buys every thing on credit, and on the longest credit he can command; often when traveling has to borrow money to take him home; and really has to make as many turns and shifts to get along as if he were poor. All simply because he lives just twelve months on the wrong side of his income. The other man, whose annual income and expenses are about the same as those of his neighbor, never has an open account; buys every thing for cash; always has plenty of money in his pocket, and a plenty more in bank; and is apparently without a care in the world, so far as money is concerned. All simply because he lives just twelve months on the right side of his income. The two men have equal resources. In the course of their lives they spend about equal amounts. Yet the one is always poor and harassed, the other is always rich and at his ease.

The picture has its counterpart in the history of many professional men. Some men in their intellectual disbursements are always beforehand and at their ease, while others of equal resources live habitually from hand to mouth. You will see an editor scratching and scrambling for copy at the very latest moment, and living, it is to be feared, in greater dread of the office-devil than of the other personage of the same name. You will see the professor quaking over his incompleted experiments or his half-finished manuscript, anxiously dreading the summons to lecture. You will see the clergyman locking himself up on Saturday to push through under high pressure the sermon that must be delivered on the morrow. These all, and others like these, simply in consequence of a bad habit of mental action, pass through life in a perpetual state of discomfort and professional poverty. Brain-work so

done is generally badly done, besides being done at a ruinous waste of the life-force.

As an illustration of a different mode of doing things let me cite a historical example. The late Doctor Murray, of Elizabeth, New Jersey, a few years since was at a clerical conference where each minister told for the benefit of the others his own experience in the matter of composing sermons. The Doctor said that he spent usually the entire mornings of five days, never less than four days, in the composition of a sermon, and that he was never without at least three finished sermons ahead! It is a recorded fact that after his death there were found in his desk no less than four finished sermons, fully written out, which had never been preached, besides a fifth sermon already on the stocks. I am informed that he has at times had as many eight sermons ahead. The Doctor, moreover, was abundant in other labors of the pen. He wrote several books. He wrote many popular lectures and addresses. He wrote almost every week an article for the *New-York Observer*, filling from one to two columns of that paper. He was a frequent attendant upon ecclesiastical councils of various kinds, and upon literary festivals such as the present. Yet he never seemed to be in a hurry, never pressed for time. He had all the comfort of a gentleman of leisure. It was simply because he early formed, and ever adhered to, the habit of being beforehand with every engagement. I knew him well, and I had from his own lips the circumstances in which he began his ministerial career. Immediately after leaving the seminary he entered upon an important charge at Wilkesbarre, Pennsylvania. He told me that on his first Sunday there he exhausted his entire stock in trade, so far as written sermons went. He had gone to the place with nothing prepared but his Presbyterial trial-pieces, and he had used those all up the first week of his ministry. On the Monday morning following, the first thing after breakfast, he went to his study and put his next sermon on the anvil and hammered away at it the entire morning, and he continued thus to work at it every day, to the exclusion of every other thing, until the sermon was completed. He settled this irrevocably and unchangeably as his method of procedure, and he kept it up through life. It was the same with every other professional engagement. He never allowed himself to drift along till near the time when any public duty was to be performed, and then turn in with frantic haste to make his preparations. He pursued no such spendthrift course as that, but on the contrary was always in ample time. He lived intellectually on the right side of his income. The consequence was, he was never hurried, never anxious, never thrown out by unforeseen accidents. The habit gave him a feeling of

ease and independence that shone forth in his very face. I commend to you his example. The only sure method of securing intellectual thrift and comfort, of doing what you do without distraction, and so of doing it in the most healthy condition of your faculties, is to establish this habit of forehandedness in your work. It is a good rule for all men. It is especially important for students.

If you will pardon a reference to the speaker himself, I would say that while, for the last twenty years, my other professional duties have been neither few nor light, I have yet during nearly all that time kept up an almost continual connection with the press, some of the time having engagements of this sort enough to occupy the ordinary working-hours of one who had nothing else to do; and yet, in all that time, though my habits of composition are laborious and slow, it is my boast that I have never kept a printer waiting for an hour. It is not that I have worked harder than many others, and certainly not that I work faster, but simply because it is my habit to be beforehand with whatever I undertake to do. If it were not so I would have been dead long ago. Nothing so soon wears a man out as working under the lash.

JOHN S. HART, in Mistakes of Educated Men.

USEFUL HINTS TO PUBLIC SPEAKERS.

IT is a curious fact in the history of sound that the loudest noises always perish on the spot where they are produced; whereas musical notes will be heard at a great distance. Thus, if we approach within a mile or two of a town or village in which a fair is held, we may hear very faintly the clamor of the multitude, but more distinctly the organs and other musical instruments which are played for their amusement. If a Cremona violin, a real Amati, be played beside a modern fiddle, the latter will sound much louder of the two; but the sweet, brilliant tone of the Amati will be heard at a distance the other can not reach. Dr. Young, on the authority of Derham, states that at Gibraltar the human voice may be heard at a greater distance than that of any other animal. Thus, when the cottager in the woods, or on the open plain, wishes to call her husband who is working at a distance, she does not shout, but pitches her voice to a musical key, which she knows from habit, and by that means reaches his ear. The loudest roar of the largest lion could not penetrate so far. This property of music in the human voice", says Cowper, "is strikingly shown

in the cathedrals abroad. Here the mass is entirely performed in musical sounds, and becomes audible to every devotee, however placed in the remotest part of the church; whereas, if the same mass had been read, the sounds would not have traveled beyond the precincts of the choir." Those orators who are heard in large assemblies most distinctly, and at the greatest distance, are those who by modulating the voice render it more musical. Loud speakers are seldom heard to advantage.

Burke's voice is said to have been a sort of lofty cry, which tended, in the House of Commons, to send the members to their dinner. Chatham's lowest whisper was distinctly heard; "his middle tones were sweet, rich, and beautifully varied," says a writer, describing the orator; "when he raised his voice to the highest pitch the house was completely filled with the volume of sound, and the effect was awful, except when he wished to cheer or animate — and then he had spirit-stirring notes, which were perfectly irresistible. The terrible, however, was his peculiar power. Then the house sunk before him; still he was dignified, and, wonderful as was his eloquence, it was attended with this important effect, that it possessed every one with a conviction that there was something in him finer than even his words; that the man was greater, infinitely greater, than the orator. Selected.

MATHEMATICAL.

PROPERTIES OF NUMBERS.—In answer to the puzzles of 'Ulysses' I find that 'H.', on page 158 of the *Teacher* for April, gives as new to him the following facts:

Such numbers as 222,222, 333,333, etc., are always divisible by 7, 11, and 13.

Such numbers as 282828, 353535, etc., are always divisible by 7 and 13.

Such numbers as 10,101, 20,202, 60,606, etc., are always divisible by 7, 11, and 13.

I here give the general investigation of these properties. The first class of numbers may be algebraically represented by $dr^6+dr^4+dr^3+dr^2+dr+d$, in which d is the repeated digit and r the radix. The algebraic factors of this expression are d, $r+1$, r^2+r+1, and r^2-r+1. When $r=10$, we have 11, 111, and 91, for the arithmetical value of the factors in which r occurs. But $111=3\times37$, and $91=7\times13$: hence

the factors of the first class of numbers are the repeated digit, 3, 7, 11, 13, and 37.

In the second case we have $br^5+ar^4+br^3+ar^2+br+a$, which equals $(br+a)(r^2+r+1)(r^2-r+1)$, or the factors are the repeated number, 3, 7, 13, and 37.

In the third case we have $dr^4+dr^2+d=d(r^2+r+1)(r^2-r+1)$, or the factors are the digit, 3, 7, 13, and 37.

If the radix were 12, we should have for the first class the factors, the digit, 7, 13, 19, and 157; in the second class, the repeated number, 7, 19, and 157; and in the third class, the digit, 7, 19, and 157. If 13, 19 and 157 were written in the duodenary scale, we should have 11, 17, and 111.

The preceding discussion shows one thing not mentioned by H., namely, that 37 is a divisor of each of the three classes of numbers.

The thoughtful student with the hints above given may discover equally interesting properties belonging to some other classes of numbers.

W. D. HENKLE.

What is a Compound Number? — Will some of our friends favor us with an answer to this question? We found it in the list of questions given to the pupils in the Cincinnati Intermediate Schools, last year, and gave it, together with the rest of the list, to our own class for a written examination. The variety of answers obtained caused a reference to the text-book used (Davies's Common-School), and we found that the term is not used in it. The *Maine Teacher* for April has a word to say about this subject, and proposes the following suggestive questions, which we should be glad to have answered by some of our own teachers:

"1. Is $12.375 a compound number?

"2. Can we multiply one compound number by another? Thus: what is the cost of 12 cwt. 3 qr. 18 lb. of sugar at 2£ 15*s*. 6*d*. per cwt.? or, Required the square contents of a board 12ft. 6′ long and 2ft. 4′ 3″ wide.

"3. Is it proper to say 'multiply the length by the breadth'?

"4. Suppose the standard inch, foot, etc., should be lost, how might they be recovered?"

B.

Problems. — XV. A man having a large farm divided it among his sons as follows: he gave 15 per cent. of it to the eldest; 10 per cent of the remainder and $\frac{1}{10}$ of an acre to the second; 25 per cent. of the remainder to the third; and then divided the remainder equally among the others, four in number. The first three received 145 acres. How large was the farm, and how many acres did each receive?

XVI. A farm containing —— acres is divided into several lots. The first, containing 10 per cent. of the whole and $\frac{1}{10}$ of an acre, is cultivated; the second, 12 per cent. of the remainder, is meadow; the third, 15 per cent. of the remainder and $\frac{1}{2}$ an acre, is pasturage; the fourth, 20 per cent. of what still remains and $\frac{2}{5}$ of an acre, is an orchard; and the rest is a wood-lot. In the first four lots are 65 acres. How many acres are there in the farm, and how many in each lot?

XVII. A man moving a building uses rollers 8 inches in diameter. How far does the building move at one turn of the rollers?

XVIII. A, B and C agree to mow a square field of grass containing 10 acres: A is to mow around first, then B, then C, and thus in order till the work is completed. Now suppose each cuts a swath 6ft. wide, how much does each mow, and which one is entitled to the last swath?

Maine Teacher.

A Valuable Table.—Few readers can be aware, until they have had occasion to test the fact, how much labor or research is often saved by such a table as the following:

1607—Virginia settled by the English.
1614—New York settled by the Dutch.
1620—Massachusetts settled by the Puritans.
1624—New Jersey settled by the Dutch.
1628—Delaware settled by Swedes and Finns.
1635—Maryland settled by Irish Catholics.
1636—Rhode Island settled by Roger Williams.
1639—North Carolina settled by the English.
1670—South Carolina settled by the Huguenots.
1682—Pennsylvania settled by William Penn.
1732—Georgia settled by Oglethorpe.
1791—Vermont admitted into the Union.
1792—Kentucky admitted into the Union.
1796—Tennessee admitted into the Union.
1802—Ohio admitted into the Union.
1811—Louisiana admitted into the Union.
1816—Indiana admitted into the Union.
1816—Mississippi admitted into the Union.
1818—Illinois admitted into the Union.
1819—Alabama admitted into the Union.
1820—Maine admitted into the Union.
1821—Missouri admitted into the Union.
1836—Michigan admitted into the Union.
1836—Arkansas admitted into the Union.
1845—Florida admitted into the Union.
1845—Texas admitted into the Union.
1846—Iowa admitted into the Union.
1848—Wisconsin admitted into the Union.
1850—California admitted into the Union.
1858—Oregon admitted into the Union.
1858—Minnesota admitted into the Union.
1861—Kansas admitted into the Union.

Merry's Museum.

OFFICIAL DEPARTMENT.

OFFICE OF PUBLIC INSTRUCTION,
Springfield, Ill., June, 1862.

REMARKS ON THE 48TH SECTION.

This section provides:

I. That school-directors shall be a corporate body, having all the powers, rights and privileges, and subject to all the liabilities and obligations, properly attaching to legally-constituted corporations. Their lawful official acts are therefore virtually the acts of the district. They may sue, and pay the necessary expenses of suit from the funds of the district: they may be sued, and if judgment is rendered against them the property of the district is liable for the amount of said judgment. Directors should be careful in all their official acts to designate distinctly the number of the district, the number and range of the township, and the name of the county; and in all suits or actions instituted by or against the directors the corporate name and style of the board must be expressly designated as required in this section, or the proceedings will not be legal.

II. No business can be legally transacted by the directors, at any appointed meeting, unless at least two members are present; nor will any order, certificate, or other official paper, drawn by them be of legal effect, unless signed by at least two of the board, or by the president and clerk: *provided*, that in case of vacancies in the board, the remaining director may order a special election to fill such vacancies, as authorized in Section 42.

III. The liability of school-directors for all debts legally contracted by them, as such, is a corporate, not a personal, liability. They can be proceeded against for the recovery of all just claims, as directors, not as individuals. Teachers and others are often non-suited in actions of debt against directors, for failing to observe this distinction in the form of proceedings. No claims are surer of being ultimately paid than those legally held against boards of directors; for to the liquidation of such debts the whole taxable property of the district is pledged, and sooner or later the amount must and will be made, by taxation or otherwise. The Act (Sec. 49) expressly authorizes the court where judgment against any board of directors is obtained to enforce payment by attachment or *mandamus*, compelling said board to levy a tax, if

necessary, to pay the amount of said judgment, with interest and costs. But it must be remembered that the property of directors as individuals is not liable for such debts.

The foregoing remarks do not apply, of course, in case of malfeasance, or neglect of official duty, on the part of directors. For losses caused by illegal acts, or through failure to perform duties enjoined by law, directors are personally liable; because in such cases their relation to the district is changed; it ceases to be of a legally representative character, and hence, their acts not having the sanction of law, they and their property, and not the district and its property, must be held answerable for the consequences. The district is responsible for contracts made or debts incurred *under the law*, and for no others.

IV. Directors are imperatively required to establish one or more free schools in each district, and to keep the same in operation for at least six months in each year. During the specified period of six months the schools must be absolutely free, otherwise they can not share in the distribution of the public funds. But the law does not designate the particular months during which the schools must be free: this is left entirely to the directors, who may select the first six months of the school-year, or the last; or they may make up the six months from different portions of the school-year. It is not necessary that the six months should be *consecutive*.

When the number of children in a district becomes too great to be accommodated in one school, or when the territorial extent of a district, the remoteness of a considerable number of the inhabitants, natural obstacles — as creeks, swamps, etc., — are such as to render it inconvenient, difficult or dangerous for all the children to attend the same school, it is the duty of the directors to establish one or more additional schools in the district, at such points as will best accommodate the greatest number of the inhabitants. And should they neglect or refuse to do so, when such necessity exists, they violate one of their plainest official obligations, and the aggrieved citizens may seek redress by attachment or mandamus, compelling them to act.

With a free school of six months' duration annually in each district the letter of the law is satisfied, and the claim to share in the distribution of the public funds is secured. But it was by no means the intention of the legislature to restrict the continuance of schools to six months. It was their purpose, on the contrary, to encourage directors to extend the term of schools beyond this limit. This is clear from the very language under review ("*at least* six months"); from the provision in this section for extending schools by special tax; and

from the whole spirit of the Act. Six months is to be understood simply as the minimum. Accordingly, the schedules of all schools over and above the six months required by law, if kept under the exclusive supervision and control of the directors and conducted according to law, are as much entitled to the public funds as the schedules of the six-months schools, whether such additional terms of school are continued free to all, or whether they are supported partly or entirely by a rate-bill assessed against the actual patrons. The mandatory requirement of six months, during which the schools *must* be free, having been satisfied, the law is indifferent as to the means by which the schools are maintained for the additional term or terms. If they are kept according to law and the schedules duly returned, the trustees must accept such schedules and apportion the public funds upon them, the same as others. It is a common error that no school can draw public money on more than six-months schedule in the same year. The law fixes no limit except the minimum of six months. Every district may have school longer if it chooses. Districts which do not elect to extend schools can not reasonably complain of those which do so elect. The privilege is open to all, and all that choose to avail themselves of it are entitled to the benefit of the public funds. But as nine-tenths or more of the school-fund is distributed in April (only the interest of the township fund accruing in October), it is recommended that the six-months school be kept in each district during the first half of the school-year, from October to April, as far as possible. This will give all an equal chance, and remove any appearance of injustice.

V. Only those who are over five and under twenty-one years of age are legally eligible to the public schools, under the general act. The directors are unquestionably authorized to exclude all who are either older or younger than the prescribed limits. Persons over twenty-one may be admitted, with the consent of the directors, on payment of such tuition-fee as the board shall prescribe; but they can not claim such admission as a legal right, nor, being admitted, can they demand the privilege of attending free. The restrictions of the general law as to age, etc., do not apply to cities and incorporated towns whose schools are organized under special acts or ordinances. (Sec. 79.) But in all cases where it is not superseded by the provisions of such special acts or ordinances the rule laid down in the general act is in full force and effect.

VI. The directors are expressly authorized to prescribe and enforce all necessary rules and regulations for the management and govern-

ment of the schools; to direct what branches shall be taught and what text-books shall be used; and to suspend or expel pupils who are obstinately disobedient or incorrigibly perverse, or whose example and influence are hopelessly demoralizing to the school.

In the exercise, by the directors, of these clearly-conceded powers, practical questions of considerable importance and difficulty often arise. We shall be aided in our efforts to reach sound conclusions on these points by first stating more in detail those rights and powers conferred by law upon the directors, about which there can be no doubt whatever; and then reason from the known and definite to the contingent and discretionary. Among the things, then, which directors have an indisputable legal right to do are these:

(1.) To prescribe such general rules and regulations touching the attendance, studies, conduct, deportment and intercourse of the pupils as shall in their judgment be necessary to secure order, decorum, punctuality, regularity, assiduity, thoroughness and proficiency, and the proper use, care and protection of all school-property, and to suspend or expel pupils who obstinately refuse to comply.

(2.) To prescribe what particular branches, to the exclusion of all others, shall constitute the course of study in their schools, and to require each pupil to pursue some one or more of the branches enumerated in said prescribed course, as an absolute condition of remaining in said school.

(3.) To prescribe what particular text-book or text-books, utensils or articles, shall be used in each of the branches embraced in the course, and to require each pupil to have and use said designated text-book or text-books, utensils or articles, and no others, as an absolute condition of remaining in said school.

(4.) To prescribe what grades and classes shall be formed in school, and what branches and books shall form the course of study in each, and what progress and proficiency shall be made in each grade or class as a condition of advancement to the same line of study in the next higher, and to refuse to allow of promotions on any other terms whatever.

All this is clear and unquestionable.

It follows that parents and guardians can not demand that their children and wards shall be permitted to study any branch, or to use any text-book, not prescribed and adopted by the directors. They must acquiesce in the regulations of the school in these respects. The power to prescribe such rules is clearly conferred by law, and the necessity of uniformity of books and studies is self-evident. For persistent refusal or failure to comply pupils may be suspended or expelled.

But it some times happens that parents are not willing that their children should study *all* the branches assigned by the directors to a particular grade, department, or class. They do not insist that they shall study branches which are *not in* the prescribed course, but that they shall study a *part only* of the branches of said course. For example: A child enters a school, or department of a school, in which the prescribed studies are arithmetic, geography, and grammar. The The directors require all the members of that school or department to study those three branches. The parents are willing that the child should study arithmetic and geography, but not grammar; and thus the issue is made up between directors and parents. What is to be done in such a case? One party or the other must recede: which shall it be? Can the directors insist that the child shall study grammar or leave the school?

A conditional answer must be given to this question. No categorical statement can be made which will be applicable in all circumstances. As a general rule, the liberty of choice among the branches *in* the *prescribed course* should be accorded to the parent, *if desired*. This liberty should not be denied unless its exercise is *seriously detrimental* to the school. The parent transfers important trusts and duties to the teacher; but there still vest in him, inalienably, certain natural rights in respect to his children, which can not and ought not to be delegated to teachers and directors, and which the latter can not abridge. Among these rights is that of private judgment as to the relative importance of different studies; the proper age for his child to enter upon the study of this or that branch; the amount of bodily confinement or mental application consistent with his child's health; etc., etc. In sending his child to school, parental obligation in these respects continues; it can not be abrogated: it is ordained of God, and is therefore sacred and inalienably paramount, in the last resort, over all counter requirements of directors and teachers.

May a parent, then, if he differs from the judgment of the directors as to what and how many studies his child shall pursue, insist upon his views even to the injury and overthrow of the established order of the school? By no means. Directors and teachers also have clear and well-defined rights and powers, of which they can not be deprived; which they must maintain. They too have duties to perform and obligations to discharge, from which they can not shrink—duties and obligations imperatively imposed and required by law. These two classes of rights and spheres of duty and obligation—the parental and directorial—do not often conflict; indeed, it is believed that they are never *necessarily* antagonistic. The real interests of the school can

not be inconsistent with the real interests of the child. Every school may, and therefore should, be so arranged and conducted as to harmonize the welfare of all with the just rights of each. If sound and enlightened views always obtained in the conduct of directors and teachers and parents, it would always be so. But schools are not seldom organized upon false principles and governed by rules of questionable wisdom; and parents are quite as often prejudiced, captious, and unreasonable. Hence conflicts of opinion and jurisdiction arise, for the adjustment of which some settled principles must be laid down.

I have said that both parents and directors have rights which, in their respective spheres, are absolute and inalienable. Those of the parent are inherent in the nature and social constitution of things: those of the directors are conferred and protected by the sanctions of law. The former have for their end the highest well-being of the child as an individual: the end of the latter is the welfare of the school as a community. The parent can not permit his child to do what he conscientiously believes would be to his injury, or to leave undone what he knows would be to his benefit: the directors can not allow that to be done which they truly think would be to the detriment of the school, or that to be left undone which is essential to its welfare. Parents are presumed to know best the mental, moral and physical wants of their children: directors are presumed to know best what is essential to the success of the school. These, as has been said, are usually consistent the one with the other. Directors should demand nothing which a wise and conscientious parent can not yield; if they do, they must not expect him to comply—he can not comply. Parents should insist upon nothing which intelligent and faithful directors, with due regard to the good of all, can not grant; if they do, they must not expect them to yield—they can not yield.

To apply these remarks a little more definitely: It is the province of the directors, through their teachers, to examine the child's attainments and decide for what studies he is fitted, and to restrict him, peremptorily if needful, to some one or more of those studies. The right to do this is inseparable from the office of teachers: it belongs to them from its very nature. If the parent believes that his child is prepared to study algebra, while the teachers know from examination that he is not, the directors may instruct the teacher to inflexibly refuse to allow him to enter upon that study; and if the parent persists in his demand, and refuses to allow the child to study some one or more of those branches for which he is prepared, the directors may exclude the child from school. The claim of the directors is reasonable and necessary, and may *therefore* be enforced on penalty of suspension or expulsion.

But if the child is fitted to study arithmetic, geography and grammar, the parent may, *if he requests it*, decide whether he shall study all three or only a part; and if a part, he may elect which it shall be. The demand of the directors that the child shall study the whole or none, on pain of suspension or expulsion, merely because those three branches constitute the prescribed studies of the class or department to which he is admitted, is untenable, because it infringes a natural right of the parent and is not essential to the good of the school. The parent may know that the health of the child will not admit of the application necessary to master three lessons a day; or he may prefer to give him private instruction in one of the branches, or to have him commence it at a later period, or he may even deny its utility altogether. The parent may or may not be right in his opinion; but his honest objections are entitled to respect, because the points in issue, as already stated, fall directly within the parental sphere, and do not ordinarily or necessarily conflict with the moral or legal obligations of the directors, or with the welfare of the school.

So, too, the right of the directors to demand that all scholars of a certain age shall study certain specified branches, regardless of the wishes of the parents and of other circumstances, can not be sustained, because such a rule is not reasonable in itself, is violative of inherent parental control, and is not called for by the interests of the school at large. For refusal to comply with such a rule directors would not, therefore, be justified in suspending or expelling a scholar.

The extreme penalties of suspension or expulsion can only be warranted by an obstinate and perverse refusal to do what the directors have a clear legal and moral right to require. The naked demand that scholars shall pursue certain branches because they are of a certain age, or that they shall study all of certain specified branches of the prescribed course, and the consequent denial to parents of any choice in the premises, not being founded in any sound principles of either legal or moral right, it follows that the above-named penalties would not be authorized in such cases.

It may be stated as a general proposition on this subject, that the law and the just demands of directors and teachers are satisfied when parents consent to have their children use such books and pursue such studies as are prescribed in the *general course* of the directors, reserving to themselves the privilege of deciding, if they choose, what *particular* branches *in* that course shall be selected.

I have thus far considered the question on the ground of abstract right, and endeavored to indicate the principles which should govern the parties when the exigency arises. It may be assumed, as a general

rule, that an intelligent and conscientious teacher will be a safe and competent adviser as to the number and class of studies to which each pupil can profitably attend, the proper age for commencing each, etc. And in point of fact the matter is usually left to his disposal. But we are speaking of the principles involved, and the boundaries of reciprocal control when parents *decline* to leave these matters *wholly* to the teacher.

In schools, as in other voluntary associations, there are mutual obligations, and there must be mutual concessions. Directors should concede to parents every privilege which does not materially impair the order and efficiency of the school. Parents should concede to directors and teachers every right which does not conflict with their settled convictions of duty to their own children. Beyond this point neither party can go. If directors adopt and enforce rules not warranted by law or necessary to the faithful discharge of their official duties, the parents have redress. If parents will not abide by the regulations justly and rightfully established, they must withdraw their children from school, or suffer them to be suspended or expelled. The remedy of withdrawal may, of course, always be resorted to by an aggrieved parent, and is the course generally adopted by those who can not concur in the usages of school, and yet are unwilling to cause trouble. But this right of withdrawal can not be pleaded in justification of improper or unlawful demands. Directors can not say, in answer to objections to their requirements, These are our rules: if you do not like them you can remove your children from school. That would be to assume the point in issue. Such an alternative might be offered if the directors were perfectly sure that their regulations were in accordance with law and right, but not otherwise. Parents may yield to improper demands, or take their children from school, rather than seek redress, as already said; but it can not be presumed that they will do so, much less can it be demanded of them. The right of honest challenge and of protection in their just rights can not be denied to parents.

It has already been intimated that cases *may* arise when the directors would be justified in requiring a pupil to study a particular branch as a condition of remaining in school. If the opposition of the parent is avowedly factious or captious and with mischievous intent, and is persisted in for no other or better purpose than contumaciously to harass the teacher and interfere with the order of the school, the directors, knowing such to be the case, may peremptorily require the scholar to study the specified branch, and in default may suspend or expel him. No person can be permitted wantonly to disturb the peace

of a school in that way. There may be other circumstances which would justify the directors in dictating particular studies, and enforcing the demand by the penalties prescribed in this section; but such exceptions are believed to be extremely rare, and do not at all impair the force of the general principles which have been laid down.

If it is objected to these views that they render it impossible to maintain the necessary classification and progressive advancement in graded schools, the reply is that the right of the directors to say what particular branches shall have been mastered as a condition of advancement from one grade to the *same line of study* in another is distinctly affirmed, and may be by them firmly maintained. Thus, the directors may appoint that no pupil shall be admitted to the class in higher written arithmetic until he shall have mastered mental arithmetic in the class below; and so of other studies. The objection is therefore not sustained.

What has been said is supported by the usage in higher institutions of learning. A student is not allowed to graduate without pursuing the full college course; nor is he permitted to take up conic sections without having previously studied algebra and geometry. But no college faculty would compel a student to take *all* the studies of the freshman class as a condition of entering college, nor require him to continue them all if begun, on pain of suspension or expulsion. He can enter upon no study for which he is not prepared; but within that limit he is allowed the liberty of choice.

The conclusions reached in this discussion may be briefly recapitulated as follows:

(1.) Pupils can study no branch which is not *in* the course prescribed by the directors.

(2.) Pupils can study no branch *of* such prescribed course for which they are not prepared; of which preparation the teachers and directors shall judge.

(3.) Pupils shall study the particular branches of the prescribed course which the teachers with consent of the directors shall direct, unless *honest objection* is made by the parents.

(4.) If objection is made, in good faith, parents may be allowed to select from the particular branches of the prescribed course for which their children are fitted those which they wish them to study; and for the exercise of such right of choice the children shall not be liable to suspension or expulsion.

(5.) If the aforesaid liberty of choice is sought to be exercised with the avowed or palpable design of thwarting the teacher and directors

and maliciously disturbing the school, it may be withheld, and the children be compelled to study the branches chosen by the teacher and directors or leave the school.

VII. The last clause of this section limits the power of directors in certain particulars, enumerating certain things which they shall not do without a vote of the people. I will state them in their order. School-directors without a vote of the people—

(1.) Can not select or locate a site for a school-house;

(2.) Can not purchase a site for a school-house;

(3.) Can not erect a school-house, or levy a tax for the purpose of erecting a school-house;

(4.) Can not purchase a school-house;

(5.) Can not change the location, or move a school-house from one place to another;

(6.) Can not levy a tax to extend schools beyond six months.

Only the last of these points requires a word of explanation.

Many suppose that directors have no power in any case to extend schools beyond six months without a vote of the people; that the question of such extension must always be submitted to a vote of the district. It is not so. It is only when *a tax* is necessary to extend schools that the question must be voted on. The directors are not required to submit the question of *extension* to the people at all: it is simply the question of *taxation* that must be submitted. If the public funds are sufficient, the directors may extend the schools as much beyond six months as they see fit, without a vote; and if the public funds are exhausted, they have a perfect right to extend schools by subscription or rate-bill, without a vote. It is not the question of *extension*, as before remarked, but extension by *taxation*, that must be referred to the people.

From a strange misapprehension of the law on this point, directors often submit the question of extension to the people, and it is voted down, to the great detriment of a large minority of the citizens of the district. This is often done when there is an ample surplus of funds in the treasury, and when the directors themselves are warmly in favor of extension, but suppose that they have not the power. It is highly important that this matter should be understood. If directors *choose* to take the sense of the district as to extension, they have the *privilege*, of course, even when no tax is necessary; but the law does not require it.

PERSONAL LIABILITY OF DIRECTORS.

In the *Illinois Teacher* for January, p. 29, I expressed the opinion that if directors employ a teacher who has no certificate they thereby become personally liable for his wages.

In Casey *vs.* Baldridge et al., 15th Ill., p. 65; and Smith *vs.* Curry et al., 16th Ill., p. 147, principles are laid down by the court which have an important bearing upon that question.

In the former case the teacher had a written contract with the inhabitants of the district; taught the school in accordance with the terms of the contract; kept a schedule as required by law; returned the same to the directors, who utterly refused to examine and certify it. Teacher brought an action against the directors. Judgment for defendants. Case was taken to the supreme court, who *affirmed* the judgment of the lower court, on the ground that the declaration of plaintiff failed to aver that the teacher exhibited his certificate to the directors prior to the commencement of school.

In their opinion the court say:

"To entitle himself to any portion of the school-funds, a teacher must obtain the requisite certificate of qualifications; and the certificate must be presented to the school-directors before the commencement of the school. This is the express requirement of the statute. The directors are not bound to examine and certify the schedule of a teacher who fails to comply with this requisition. This requirement of the statute is a condition precedent, and its performance ought to be distinctly alleged in the declaration."

This important decision was based upon the 76th section of the Act of 1849. That act has since been repealed (*vide* Acts of 1857–'59–'61, § 97); but the provisions of said section of said act have been re-enacted without material change, in the 52d section of the present act. The ruling of the court would therefore seem to be clearly applicable to like cases under the present law.

The decision seems in effect to affirm that the exhibition of the certificate by the teacher to the directors, before commencing school, is a *condition precedent* not only to recovery of the school-fund, but also to the validity of the contract itself, and hence to recovery of the directors as individuals. The latter point was not directly in issue, but would seem to be involved in the scope of the decision — that, in default of compliance with this necessary condition, the teacher is wholly without legal redress, so far as the public funds are concerned, and must lose the whole of his wages unless voluntarily made up to him by the friends and patrons of the school; that the consequences

in such cases fall legitimately upon the *teacher*, for failing to *obtain and exhibit* his certificate, rather than upon the *directors* for failing to *demand* it.

It is true, the contract in this case was between the teacher and subscribers, in stead of directors; but if the opinion of the court is to be understood as affirming that without the exhibition of the certificate there is in fact *no contract*, it would seem to carry with it the whole question of personal liability; for if there is no contract, there are no obligations which can be enforced against the directors.

The decision in January *Teacher* that township treasurers can not pay schedules in such cases is expressly confirmed by the supreme court in the above-cited case. For the court say that without the requisite certificate the teacher "is not entitled to any portion of the school-funds."

I have repeatedly urged upon teachers, in correspondence and public circulars, the necessity of strict compliance with the law in respect to certificates. All that I have ever said upon that point is emphatically sustained by the supreme court in the opinion quoted herein. Teachers are therefore renewedly cautioned not to incur the risk of losing their entire wages by neglecting to obtain and present their certificates before commencing work. It will not be safe to count upon recovery from the directors as individuals.

I avail myself of the first opportunity to state the principles enunciated by the supreme court, that their bearing upon the question of the personal liability of directors for teachers' wages, in the cases supposed, may be understood and considered. It is my purpose to render the opinions and interpretations on the school-law and school-questions published in the *Teacher* reliable and trustworthy in all respects. Whenever the points treated of, or any kindred points, shall have been adjudicated by the supreme court, the authority of that tribunal will be taken as the ground, or adduced in support, of the positions assumed; and in all other cases it will be my aim to support the views that may be advanced by sound principles of interpretation, by just reasonings, and by whatever of light may be derived from educational philosophy and from a careful study of our own and other systems of public instruction, as well as from an attentive examination of the most enlightened and successful usages and policy in the conduct of schools.

It was not my intention in the January *Teacher* to require school commissioners to prosecute directors by suit, although the language used might perhaps be so interpreted, but simply to endeavor to arrest the evil referred to, and prevent the acceptance and payment of illegal schedules, by the means therein suggested.

STATE CERTIFICATES.

To the Teachers of Illinois:

As already announced, the Third Examination of teachers for State Certificates will be held in the City of Springfield, commencing at nine o'clock A. M., on Wednesday, August sixth, and continuing two days.

Conditions.—Applicants for the State Diploma will be required:

(1.) To produce certificates of good moral character, signed by responsible persons.

(2.) To have taught not less than three years with decided success, at least one of which shall have been in Illinois.

(3.) To pass a thorough examination in Orthography, Penmanship, Mental and Written Arithmetic, English Grammar, Modern Geography, History of the United States, Algebra through Quadratics, the elements of Plane Geometry, and the Principles and Methods of Teaching.

Normal Graduates.—Regular graduates of any legally-organized State Normal School will be entitled to State Certificates, without examination, upon compliance with the *first* and *second* of the above conditions.

Mode of Examination.—This will be: (1.) By written answers to printed questions; a definite time being given to each subject.

(2.) By oral questions and answers, with use of blackboard, to elicit the applicant's knowledge of Theory and Practice.

Miscellaneous.—(1.) Applicants for State Certificates will be cordially entertained, during the examination, by the friends of education in the city.

(2.) Teachers desiring such private entertainment will apprise me of their wishes beforehand: it will be assumed that private accommodations are not desired unless the above request is complied with.

(3.) As soon as you have positively decided to attend the examination, please inform me of the fact. Arrangements can not be made without knowing, in time, how many are to be present.

(4.) If further information is desired upon any matters connected with the examination, it will be promptly furnished by the undersigned, upon application to him by letter or otherwise.

References.—The following gentlemen are familiar with the whole movement, and with the mode and character of former examinations, and may also be addressed on the subject: Messrs. W. H. Wells and W. Woodard 2d, Chicago; Perkins Bass and E. C. Hewett (Normal

University), and Samuel Willard, Bloomington; Wm. M. Baker, Quincy; A. M. Gow (Editor *Teacher*), Dixon; J. H. Blodgett, Amboy; and J. D. Low, Springfield.

Motives.—(1.) The State Certificate is a legal and perpetual license to the holder to teach in any school-district in the State. It supersedes the necessity of any subsequent examination by school commissioners. (*Vide* § 50, Act of 1861.)

(2.) The State Certificate, being the highest official recommendation of the holder, as a teacher, to the confidence of the public, known to the law, is an important aid in securing the most eligible and lucrative positions in the public schools of the State.

(3.) The State Certificate is awarded only upon conclusive evidence of moral worth, thorough scholarship, and distinguished professional ability: its attainment is therefore worthy of any teacher's generous ambition, and confers rank and position in the best circles of the profession.

(4.) The State Certificate was authorized by the General Assembly to be granted to eminent practical teachers, as a public recognition of theirs as a distinct and honorable Profession; as an incentive to the best minds in the State to become and remain teachers; as a means of inspiring them to greater hopefulness, devotedness, and enthusiasm, and of inciting to the attainment of the highest professional excellence and skill; and therefore,

(5.) The teachers of the State owe it to themselves to respond promptly and heartily to the invitation of the legislature, and to strive to deserve and obtain the distinction so wisely and generously proffered. They owe this to the vocation of their choice; to the sentiment of self-respect and professional pride; to the urgent claims of our common schools; to the grand idea of a generation of virtuous, intelligent freemen; to the voice of patriotism, humanity, and religion, warning us not to neglect the education of our children.

The State has done its part. The Teachers' Profession is formally acknowledged by legislative authority. The door to honorable distinction and professional reward is opened. The invitation is given; the appeal is made. Those who are worthy may step to the front rank, enjoy the honors and reap the advantages of an organized brotherhood of professional teachers.

There are not less than one hundred teachers in the State who ought to attend the next examination. Think of it, and act accordingly. So shall a sentiment be formed which will give permanent direction to the educational policy of the State.

NEWTON BATEMAN, Sup't Public Instruction.

EDITOR'S TABLE.

EDITOR'S CHAIR.

ATTENTION, TEACHERS! — We would direct the attention of teachers to the notice by Superintendent Bateman of the THIRD EXAMINATION of teachers for State Certificates, which will take place in the city of Springfield on Wednesday, August 6th, commencing at 9 o'clock A.M. The examination will continue for two days.

It is hoped and expected that there will be a large attendance of wide-awake teachers on this occasion, that the list of legally-recognized professional instructors may be greatly increased in our state. The examination will be severe, yet fair and impartial. Those who pass the ordeal and receive the Diploma from the Department of Instruction must do it upon an investigation of their theoretical and practical knowledge; and a certificate thus obtained is certainly an honor to its possessor. Already some thirty diplomas have been awarded by the Superintendent, and it is hoped that this examination will largely increase the number.

Any information that is desired upon the subject may be had by addressing Hon. Newton Bateman, Springfield, Illinois.

PERSONAL. — We regret to learn that our friend Major J. W. Powell, formerly a teacher at Hennepin and an active member of the Illinois State Natural-History Society, had the misfortune to lose an arm in the terrible battle at Pittsburg Landing. The Major has our sincerest sympathy for his loss.

Lieutenant W. S. Wood, of the 34th Regiment, formerly a teacher in North-Dixon, and Vice-President of Illinois State Teachers' Association, recently returned from Tennessee bearing an honorable mark of rebel attention in the shape of a bullet extracted from his hip, which was received at the battle of Pittsburg Landing. Friend Wood expects to return soon to Dixie. All honor to the fighting schoolmasters. Will our friends send in the names of others who have bled or died?

SCHOOL-MONTH. — We are glad to learn that our State Superintendent, Mr. Bateman, has published the *dictum* of the Department in relation to the number of days which shall constitute a month. It has been a vexed question for a long time, and we are thankful that, in the absence of any special agreement to the contrary, the school-month shall consist of twenty teaching-days, or a lunar month. We know, however, of districts in which all the days of the calendar month, Sundays excepted, are used for instruction, and this upon the principle that, as the swineherd is occupied all the working-days of the calendar month in

tending his charge, so the schoolmaster should be required to spend an equal amount of time in tending his herd of bipeds. Such illiberality and folly is rare; and we think that when teachers become aware of the views of the Department they will not submit to such injustice to themselves or their pupils.

We observe that the Legislature of the State of Pennsylvania has recently passed the following law in relation to the same subject, incorporating with it, however, a new idea. We give the section as adopted:

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania, in General Assembly met, and it is hereby enacted by authority of the same*, That twenty-two days shall be held to be the common-school month in all contracts with teachers and other operations of Boards of Directors or Controllers in reference to the term of instruction of the schools; and that no common school shall be kept open for the purposes of ordinary instruction on any Saturday, but two Saturdays of each month, as the proper Board of Directors may designate, shall be appropriated to exercises or institutes for the improvement of the teachers of the district.

This is a new feature of teachers' institutes. In that state the districts contain frequently eight or ten schools, and it will be observed that the teachers are required to spend two Saturdays in each four weeks in the work of mutual improvement. This will secure township institutes throughout the state during the terms the schools are in session. What the effect of these compulsory meetings on county institutes will be, or on the teachers themselves, we are somewhat at a loss to determine. We shall look with considerable interest to the result of the experiment, hoping it may prove all its projectors anticipated from it. Pennsylvania has made and is making great progress in the development of her system of common schools; and it is not likely she will take any step backward, at least as long as her educational interests are watched over by her able Superintendent, Hon. Thomas H. Burrowes, who for a quarter of a century has so identified himself with the cause as to be styled, and not inappropriately, 'the Father of the Pennsylvania Common-School System'.

ROCK ISLAND COUNTY.— We have received the Report of the School Commissioner of Rock Island county, Mr. C. M. Hardy, to the Board of Supervisors. It is refreshing to receive a school report which is plain, pointed, and practical — calculated to do good rather than to win praise by indiscriminate flattery. The general topics treated of are —'School-Houses and Grounds'; 'Text-Books'; 'Errors in Teaching'; and 'Grades of Teachers'. Mr. Hardy makes a sad exhibit of school-houses and school-grounds. Surely, if there is any part of our intellectual education more important than another, it is that which leads to the protection and improvement of public and private property. One would infer from a visit to the majority of the school-houses throughout the country that decency, morality, and respect for property, were never taught and almost unknown. "Of the seventy-three houses visited fifty-six were not furnished with out-houses." What kind of education is that which neglects even the first principles of civilization? Unventilated and unclean rooms are the rule and not the exception: for the former the parents and directors are responsible, and for the latter the teachers. "Only sixteen lots in the county are fenced, and but five beautified by shade-trees. Of these full one-half, through the carelessness and destructiveness of the pupils, are as much exposed as the remaining fifty-seven."

On the diversity of school-books Mr. Hardy makes a sad report. These facts alone are enough to condemn the system of schools where they are found to exist; and it is a most happy circumstance that a commissioner is found who has the intelligence to perceive and the courage and manliness to expose such gross mismanagement. If the supervisors are so much interested as to adopt the plan suggested by the commissioner of calling a convention of directors to confer on the subject of school improvement, we think it would have a happy effect upon the schools. We know that the same plan has effected good elsewhere, though we do not know that the experiment has been made in this state. We hope the suggestion will be carried out, and that we may be able to make a good record of the proceedings.

It is not to be presumed that Rock Island county is in any degree inferior to many other counties in the state. The same state of things would be found to exist in every county more or less if the commissioner could and would see them. We conceive if the office of commissioner is of any benefit at all, it must arise from a personal investigation of the real condition of the schools. When errors in management are discovered they should be exhibited,— not offensively, nor to the injury of school-officers or schools, but in such a manner that improvements would be appreciated and remedies applied. Good as many of our schools are, there are none perfect; and the only way of approximating to perfection is by discovering the errors and prescribing their cure.

"His Mark."— The boasted superiority of the South in cultivation and refinement is well illustrated by the statement of a correspondent at Roanoke Island, that in one company of the *Wise* Legion, out of sixty-four men but *seven* could sign their names; and in another, only *five* out of fifty-eight could accomplish the same feat. When will our *southern brethren* learn that their peculiar institution is a greater curse to themselves, if possible, than to their blacks? Exchange.

The Wise after whom this 'Wise Legion' is named is the famous, or rather infamous, Ex-Governor Henry A. Wise, who, when in Congress, 'thanked God there was no newspaper published in his district'. Where men do not read even the newspaper it is not strange they can not write their names.—Ed. Teacher.

Spelling by Writing.— A few years ago oral spelling was universal, but now it forms the exception, in the best class of schools, in stead of the general rule. In all well-regulated schools spelling by writing is conceded to be not only the most expeditious but the best plan of acquiring a knowledge of orthography. When we consider the advantage of being a good speller, and the frequent mortifications imperfect spelling occasions, it seems wonderful that the best and only natural method of teaching it was not discovered centuries ago. We not unfrequently meet good *viva voce* spellers who, when writing, make the most inexplicable blunders. This is attributable to the training of the ear to the neglect of the eye. There are a great many ways of conducting a spelling-lesson, which will result more advantageously if combined than to pursue either exclusively. In the first place I would mention oral spelling, in which each pupil pronounces and spells the word given him. A second method is to require the class to bring the lesson written to the recitation, and then allow them to spell in turn from their slates. A third method is to select the most difficult words from the lesson, require them to be written at dictation, collect the slates and mark the results, giving the per cent. to which each is entitled. A fourth method is to give out several hundred words in regular order, requiring each pupil, in stead of spelling orally, to write the words given him on his slate. After having gone around five, ten or twenty

times, let them spell in the order in which the words are given. A fifth method is to select all of the hard words of the course, or of the lesson, require the class to number 1, 2, 3, 4 — 1, 2, 3, 4 — 1, 2, 3, 4, etc., then give to all of No. 1 the same word, all of No. 2 another word, all of No. 3 another, etc. When they have ten or twenty words each, either collect the slates and mark them, or, if the pupils are large enough, let them exchange slates, and each one mark his neighbor's. Each pupil that misspells a word is required to write it correctly five, ten or twenty times. This generally makes a lasting impression. Ohio Teacher.

The above is good — very good; but we should prefer, after pupils bring their exercises written on the slate, thus giving evidence of their preparation, that the slates be laid aside, and the blackboard be used for writing by the whole class. By this method the work will be done more rapidly, since it is much easier for the teacher to glance at each one's work and make corrections than it would be to walk to the pupils and examine the slates, or have them walk to him. In a physical point of view we should greatly prefer the blackboard exercise, since it gives motion to all the muscles, and thereby promotes the health and strength of the pupils.— Ed. Teacher.

Thanks.—We take this method of replying to many of our kind friends to thank them for their interest in and sympathy for the cause we are laboring to promote and the organ by which that cause is represented. We desire our *Teacher* to have the first rank among the educational monthlies of the country. This is an excusable ambition, and we hope a large number of the teachers of Illinois will share with us in it, and endeavor, as we will, to make it appreciated for its excellence and usefulness. Our subscription list has nearly doubled during the present year, and from the notices of our cotemporaries and the exertions of friends during that time, whom we thank most sincerely, we hope to widen our circle of usefulness very much before its close. We not only desire help by additions to the subscription-list, but also from the pens of our readers. If you have not time to give us leading articles, you can jot down local news. We wish to know what is doing in all parts of the state; where fine school-houses are being built; where changes of system are taking place: we would like to receive reports of school commissioners concerning their work; and also reports of Teachers' Institutes. 'Come, Brothers, arouse!' bear a hand, and we will push the educational ball all over our state, until ignorance shall not find a single spot or corner to hide itself.

The Highest Civilization.— A New-York paper gives the following as an illustration of secession ignorance: A Louisiana State Superintendent of Schools, some time since, made an urgent recommendation in his report that at least two out of each three of the school-district directors should be required to be able to read and write; and he told of one 'parish' (county) where the whole twelve directors made their marks to a teacher's certificate!

Nashville.— The same week in which General Buell occupied Nashville the common schools of the city were reöpened, after having been closed for months by the rebels. What eloquent arguments are presented in the rekindling of destroyed light-houses and the reöpening of public schools, to enforce the idea that national prosperity and individual happiness equally demand the restoration of our unity as a government. Exchange.

GRAMMATICAL.— Is not the sentence in the 9th grammatical interrogatory to applicants to Providence High School, published in May *Teacher*, when corrected as proposed by the committee, still grammatically incorrect — "The boy intended *to have laid* his book upon the table"? It should be "The boy intended *to lay* his book upon the table." The former expression declares the completion of the action before the intention to perform it, which is absurd. It is, however, a very common blunder, and I have heard men holding very prominent positions in the *profession* commit it. H.

The query of our friend H. would be pertinent if the examining board had proposed to have the sentence *corrected* in the way he suggests. But the board made no such proposition, nor is there any indication that such a *correction* would have suited their views. The examination was held for the express purpose of testing the knowledge and ability of the pupils; and any aid from the examiners would evidently defeat that purpose. The phraseology of the proposition itself is liable to criticism on the score of ambiguity, as it might seem to imply that all the sentences given are incorrect, while of one of them this is not true; but we find no warrant for the position assumed by H. with regard to the particular sentence under consideration.

A NEW SOLUTION.— Not long since a certain quack, who looked as wise as an owl, was addressed by one of his patients thus:

"Doctor, tell us how it is that when we eat and drink the meat is separated from the drink."

"Why, I will tell you", said the learned man of pills. "You see as how there is in the neck two pipes — one of them to receive the meat, and the other the drink. At the top of them pipes is a lid or clapper, and when we eat this clapper shuts up the drink pipe, and when we drink it turns back upon the meat pipe — a see-saw kind of motion. Queer apparatuses, I assure you."

"But, doctor," said the patient, "it seems to me that ere clapper must play a sharp game when we eat pudding-and-milk."

Quack took his hat and slid.

WEIGHT OF A MILLION DOLLARS IN GOLD.— To the question "What is the weight of a million dollars in gold?" an officer of the mint answers as follows: The weight of a million dollars in gold, United States currency, is 53,750 troy ounces. This makes 4,479 pounds 2 ounces, or nearly two tons and a quarter, reckoning two thousand pounds to each ton. As weighty as it is, no doubt if the amount were offered to any body who could lift it, enough persons would be found ready to break their necks in the vain attempt.

LESSONS IN ETYMOLOGY.— The *Comic Grammar* gives the following lessons:

But remember, though box
In the plural makes boxes,
The plural of ox
Should be *oxen*, not oxes.

And remember, though house
In the plural is houses,
The plural of mouse
Should be *mice*, and not mouses.

University of Michigan.—We have before us the catalogue of this institution for 1862. It is located at Ann Arbor, and is presided over by the Rev. Henry P. Tappan, D.D., LL.D. The faculty is composed of twenty-seven gentlemen in all the departments. There are Classical, Scientific, Medical and Legal courses of study: the first two extend through a period of four years, the last two through a period of two years each. There have been 615 students in the University during the year; of these 216 were in the medical school, 129 in the law school, and 270 in the classical and scientific courses. The annual income of the institution is upward of $40,000, so that the only charge to the student, from whatever part of the country he may come, is an admission-fee of ten dollars and an annual payment of five dollars. The fee of ten dollars entitles the student to the privileges of permanent membership in any department of the University. It is a shame and a wrong that Illinois has no such school, and that her sons are obliged to go out of the state to secure first-class educational advantages. We hope ere long that our state may have a University in addition to our present excellent Normal School for teachers.

State Certificates.—We would invite the special attention of those who intend to be successful and influential teachers to the notice of the Superintendent in the present number. The promotion of the profession by conferring the State Diploma according to law is no longer an experiment. Some of the best teachers in the state hold this evidence of their capability, and there are those whose standing will be questionable unless they fortify themselves by taking the front rank at an early period. As the time appointed for the examination is in August, the schools will not be in session, giving all who desire, so far as vacation is concerned, an opportunity to attend. An account of the last examination will be found in the April number of the *Teacher*, by 'One who was there'.

Illinois State Agricultural Society.—We have received the catalogue of the premiums offered for competition at the State Fair, to be held at Peoria from the 29th of September till the 4th of October, inclusive. The list is a very full one, and competition is open to the citizens of other states. We are pleased to notice the premiums offered in the department of Natural History, embracing Botany, Geology, Mineralogy, Ornithology, Mammalogy, Conchology, and Entomology. Success to an institution which can do so much for the good and the glory of Illinois.

William Barge, Esq.—We would call attention to the excellent address in this number. It speaks the true doctrine of government for home, the school, and the country. These sentiments should be widely disseminated.

Harvard University.—We would direct the attention of young men desiring a special course of instruction to the facilities offered by Harvard University. No institution in the country affords greater or perhaps equal facilities to 'old Harvard'.

Situation Wanted.—Mr. M. V. B. Shattuck, who holds a State Certificate, and who has taught successfully for several years past in this state in schools of the higher grades, desires an eligible situation for himself and wife. Mr. S. may be addressed at New Boston, Illinois.

Dead.—We regret to learn the death of Prof. Miles J. Fletcher, Superintendent of Public Instruction of the State of Indiana. In company with Gov. Morton and other gentlemen, he was going on an errand of humanity and patriotism, to alleviate the sufferings of the sick and disabled soldiers who were lying between Indiana and Pittsburg Landing. The party were proceeding on a special train, and when about twenty-six miles below Terre Haute came in contact with a large stock-car which had been standing on a side-track but had been sufficiently moved past the switch to produce a collision. The Professor was partially asleep in a seat in the rear of the Governor, when he was suddenly awakened by the noise, and hoisting the window was struck by a piece of the car on the head, crushing it and killing him instantly. No other one was injured by the accident.

Will 'X' please explain that in nineteen-twentieths of our school-buildings the means for and the attention given to ventilation are inferior, or at best only equal, to those of Amboy? In other respects *we* accept his critique with pleasure.

H.

LOCAL INTELLIGENCE.

Macon County Teachers' Institute.—The semi-annual meeting of the Teachers' Institute of Macon county was held at Decatur, opening its sessions on Wednesday, the 9th of April, and continuing four days. Owing to the unusually inclement weather and the bad condition of the roads, the institute was not as fully attended by the teachers as was hoped for. On Wednesday evening quite a large audience of citizens and teachers were entertained by an address from Prof. E. C. Hewett, of the Normal University, entitled 'What for'. On Thursday evening W. S. Crissey addressed the institute on 'Educational Aspirations'. The following are the officers for the ensuing year: President, C. C. Burroughs; Vice-President, A. J. McGlumphy; Secretary, J. C. Lake; Cor. Secretary, B. F. Swasey; Treasurer, D. L. Bunn.

The meeting was pleasant and profitable, and was closed with the customary resolutions. We thank our friends for their efforts to extend the circulation of the *Teacher*.

The Mercer County Teachers' Association held its semi-annual session at Aledo on March 12th, 13th, and 14th. There were but forty teachers in attendance, owing to the almost impassable state of the roads; yet a goodly interest was manifested in its success by all attending. The President, Wm. McK. Young, in the chair. Although the streets were very muddy and the weather quite stormy during the entire session, each session was well attended by the citizens. Lectures were delivered by W. L. Campbell, Esq., and Rev. W. W. Williams. Exercises in Mental Arithmetic were conducted by P. Griffith; in Reading, by I. McManus; in Written Arithmetic, by M. V. B. Shattuck; in Orthography, by E. Summers; and in Grammar, by Mrs. M. V. B. Shattuck.

Great interest was manifested by both teachers and citizens in the discussion of the following resolution, viz:

Resolved, That Clark's System of Grammar is better adapted to the wants of our common schools than any other now in use.

Messrs. F. C. Swofford, G. C. Shoemaker, J. E. Harroun, and J. H. Reed, Esq., of the *Aledo Record*, affirming, and Jas. Henderson, Wm. McK. Young and M. V. B. Shattuck denying. After a very spirited and lengthy discussion, the resolution was tabled. The *merits* and demerits of this system were pretty thoroughly exhibited, and much good will result from it. There is no *hobby* among the teachers of this county that is working with less favorable results than this one; yet no other has *half* as many 'riders'.

Much interest was manifested by both teachers and citizens during the afternoon session of the last day to hear the report of the Committee of Award on Prize Essays on 'The *Duties* and *Requisite Qualifications* of the *Successful Teacher*'. There were nineteen competitors for the prizes. The first prize, a splendid copy of *Webster's Unabridged Pictorial Dictionary*, was awarded to Essay No. 8, the author of which proved to be M. V. B. Shattuck, of New Boston; and the second, a copy of *Page's Theory and Practice of Teaching*, to Essay No. 4, by Fred. W. Livingston, of Viola. Both of these gentlemen have State Certificates. During the sessions of the Association the former gentleman advocated the claims of the *Illinois Teacher* upon the Association as a body, and its members as individuals. He hoped the day would soon come when no person who was not a *both* a *subscriber* and a *reader* of the *Illinois Teacher* could receive license to teach in the state. In response to his earnest appeal he received the names *and the dollar* from five of the *forty* teachers present *who did not take* it. The general excuse offered for not subscribing was that 'the times' were *so* hard that they could not afford to take it; and I am afraid that with *such* persons *the times* will always be too hard. S.

Hancock Co. Teachers' Institute was in session at Plymouth, Hancock county, on Monday evening, April 14th, and continued until Friday night. We infer from the minutes that the meeting was pleasant and profitable. No mention is made of the number of teachers in attendance. At the close of the institute there was an agreeable sociable. G. W. Batchelder and R. M. Black are President and Secretary.

NOTICES OF BOOKS, ETC.

Papers on Calisthenic, Gymnastic and Military Exercises, and Physical Education. Selected from *Barnard's American Journal of Education*. No. I. Physical and Military Exercises in Public Schools. By Maj. E. L. Molineux. Pp. 26. 15 cents. Chicago: Geo. Sherwood.

This is the first of a proposed series of papers, embracing among others the following subjects: 1. Thoughts on Physical Culture, by various authors, ancient and modern. 2. Health Movements for Home and Primary Schools. 3. Calisthenic Exercises for Girls. 4. Gymnastic Exercises for Boys. 5. The Industrial Element in Schools. 6. The Military Element in Education, and the History and place of Military Schools in a System of Public Instruction. 7. Military Exercises and Discipline in Schools not specially Military. 8. Account of Juvenile Schools not specially Military in which Military Drill and Discipline are used. 9. Military System, Cadet Corps, and Target-Shooting in Switzerland. 10. Manual

for Cadets Corps in Schools. 11. Military Gymnastics as Taught in France and Prussia. 12. The French and English Schools of Musketry.

DeWolf's Instructive Speller and Hand-Book of Derivative Words. Cincinnati: W. B. Smith & Co.

This is a valuable school-book, intended to be used either in the oral method or by dictation. The words are divided, accented, and vocalized, as in a dictionary. It also contains derivatives from the Latin, Greek and Anglo-Saxon roots, with abbreviations of English and Latin terms, and translated phrases from Latin and French. By this book considerable variety may be introduced in the teaching of spelling, thus adding to the interest of the study. Assistance is also afforded to beginners in the study of etymology as well as orthography.

Barnard's American Journal of Education. New Series. Published quarterly: 15th of March, June, September, and December. Each number 304 pp. Single number, $1.50; one year, $4.00. Henry Barnard, editor, Hartford, Conn. Chicago: Geo. Sherwood.

The March number contains papers on the following topics: Portrait of Math. Vassar. 1. What is Education? Defined by English Authorities. 2. Conversation on Objects. 3. Math. Vassar and Vassar Female College. 4. The Schoolmaster, by Roger Ascham. 5. Misery and Crime as Affected by Instruction in Schools. 6. Gideon Hawley. 7. Greek Views on Education. 8. Roman Views on Education. 9. System of National Schools in Ireland. 10. Instruction in the German Language. 11. Legal Provision for the Professional Education of Teachers in Prussia. 12. The Earliest plan of an Agricultural College in England. 13. Plan of a Trade or Industrial School in England. 14. Polytechnic School of Baden and Carlsruhe. 15. Swiss Federal Polytechnic School at Zurich. 16. Mark Hopkins, portrait. 17. System of Public Instruction in the Grand Duchy of Baden. 18. Guizot's Ministry of Public Instruction in France. 19. Rhode Island State Normal School. 20. Dana P. Colburn, portrait. 21. Public Schools in Connecticut. 22. Educational Movements and Intelligence.

No professional teacher can afford to do without the *Illinois Teacher* for news at home, and *Barnard's American Journal of Education* for educational news from abroad. Send for both at once.

Political Economy. By Henry C. Baird. New York: Appleton & Co.

This little work, which we have read with much interest, is the substance of an article prepared by its author for *Appleton's Cyclopædia*. As might be expected, it is devoted rather to the history of the origin and development of the science of political economy, and a review of the labors of those who, in Europe and America, have written upon the science of politics, than a formal investigation and discussion of principles by the author himself.

After a rapid consideration of the labors of political-economists from the earliest times at which this subject engaged attention as a science to the present time, he proceeds to notice more at length the labors of the most distinguished American who has written on this branch, Mr. Henry C. Carey.

At this time, when the policy of our government is undergoing changes so great and radical, the science of government should certainly receive much attention from all intelligent American citizens. A.

First Lessons in Mechanics: with practical applications. Designed for the use of Schools. By W. E. Worthen. New York: D. Appleton & Co. 192 pp.

This little work contains much of that matter which is usually found in works on Natural Philosophy, but differs from them in treating of Mechanics exclusively. It treats of "the simple mechanical powers; the most important machines in which they are combined; the composition and resolution of forces; the centre of gravity; motive powers; water wheels; steam engine; gearing and shafting; the various kinds of pumps; and friction, with its effects on machinery," etc. The book is neatly printed, and contains many good illustrations. There are questions of mathematical application connected with each mechanical principle.

I. The Pearl of Orr's Island: *A Story of the Coast of Maine.* 1 vol., 12mo. $1.25.
II. Agnes of Sorrento: *An Italian Story.* 1 vol., 12mo. $1.25.
By Harriet Beecher Stowe. Boston: Ticknor & Fields.

We have received, too late to do more than call attention to them in this number, from S. C. Griggs & Co., Chicago, who will send them, *prepaid*, to any address, on receipt of price, these last new novels by Mrs. Stowe. B.

The Legal Adviser and Commercial Record. Chicago: E. M. Haines, Editor and Proprietor. Large quarto. 8 pages monthly. $1.00 a year.

We have received several numbers of this journal, and have given them a somewhat careful examination. Our conclusion is that no lawyer, judge or justice of the peace in Illinois, who intends to be thoroughly posted in the statutes of the state and their interpretation by the supreme court and other competent authorities, can afford to do without it. In addition to its specialty as a *legal adviser*, each number contains historical, statistical and commercial articles, and discussions of questions of public interest, which render it valuable to any man who desires to increase his fund of general information.

Mr. Haines is favorably known throughout the state as the author of several standard works for the use of justices of the peace, constables, and others holding official and fiduciary positions. N.

Music.—

We have received song, 'Better Days are Coming', published by Horace Waters, 481 Broadway, New York. A patriotic piece — suited to the times —

"There are voices of hope that are borne on the air,
And our land will be freed from its clouds of despair;
For brave men and true men to battle have gone,
And good times, good times, are now coming on.

Hurrah! Hurrah!! Hurrah!!!
Sound the news from the din of battle booming,
Tell the people far and wide that better times are coming."

Song — "Where Liberty dwells, there is my country."
Duet, with chorus.

Song — "Shall we know each other there?"
Duet or Quartette, with chorus.

Our wife, whom we have constituted musical editor, says the above are very good. If it is true that the character of a people is in any degree attributable to the influence of music and song, then we have great hopes that the coming generation will be thoroughly imbued with principles of Liberty, Humanity, and Patriotism, arising from the great number of songs which the times have called into existence. Success to the patriotic, liberty-loving song-makers.

ILLINOIS TEACHER.

VOLUME VIII. JULY, 1862. NUMBER 7.

UNION GRADED SCHOOLS.—NUMBER III.

No school can be made valuable to a community unless its design and management is appreciated by the people and their coöperation secured in its behalf. Public schools depend upon the people for support; it is for them the work of instruction must be carried on, and they must be relied on to furnish the means. They are the stockholders in the enterprise, and the extent of their investment will determine the interest they feel and be an answer to the question 'Will it pay?'. No one wishes to invest capital, labor, or sympathy, unless it pays. Payment may be secured in various ways, according to the character of the investment. Money is invested in railroad stock in expectation of realizing a per cent. upon the capital employed, or of improving the material interests of the section where the road is located. Money and labor are invested in schools in the expectation that the rising race educated therein may return with other blessings a greater per cent. of affection and duty to the parents, and of love and honor to the country, that afford them such advantages. Schools promote popular intelligence; and the educated man makes the safest citizen as well as the most courageous soldier, showing his appreciation of the blessings he enjoys and his determination to preserve them. A community that understands the value of material improvements will not be long without them; and in the same way and for the same reason, if they really understand the advantages of school discipline for children, they will be willing to support good schools.

It was made evident in our last number that all the stockholders can not, in the nature of things, participate directly in the management of all matters pertaining to the company. Wisdom and experience demand that a selection of a sufficient number of suitable persons be made to represent the whole and take care of their interests. Com-

mon shrewdness generally tells who should be selected as directors of a railroad company or of a bank, to look after and secure its capital and command a large return. Common sense ought to instruct a community to select those men as their representatives in the common-school corporation who are the best fitted to discharge the onerous, responsible, and often difficult and disagreeable, duties that arise from the proper care of the schools. The guardians of education should be men of enlarged views, of good common sense, and lovers of learning: men who can and will devote time and attention to the business for which they are chosen. They should be men who are willing to learn some things concerning schools which, from the necessities of their business, they do not understand. They should take all reasonable measures to inform themselves concerning the operations of the school-law, and also concerning the modes necessary to secure for the people, whom they represent, the greatest amount of good with the most reasonable economy of expense. The school-law provides for the election of directors who shall represent the people in their educational investments for the benefit of their children. These directors, as their name and the functions of their office imply, should have entire control and management of the schools as far as their services are required; and it is one of the primary conditions of success in any school that the directors manage it, and that officious fathers and intermeddling mothers do not interfere with its operations.

As the directors of the railroad are intrusted with the general investment of funds, the building of houses, the furnishing of stock, and the selection of those who are to do the details of the work, so the school directors are intrusted by law with certain powers concerning the raising of means, the erection and furnishing of school-houses, and the selection of suitable persons to instruct and discipline the school. As these functions are so intimately connected with the well-being of the school, their proper discharge is one of the fundamental conditions of its success. The people should not complain of their school directors, for they are just what a majority desire them to be. It easy to know who are the efficient, intelligent, philanthropic citizens suited to fill this most important office, and if such are not selected it is sufficient from this fact alone to estimate the educational desires of the community.

Having proceeded thus far, the question arises 'What sort of a school is wanted to satisfy the community?', for the proper erection of school-buildings depends upon the answer. Many districts, without any special consideration of this subject, when the number of pupils is too great for one teacher, have erected two or three little houses

and placed them in certain locations to suit the people by their nearness of access, forgetting, or perhaps not knowing, that the nearness of children to school — within, say, a mile — is the last consideration to be regarded. It is a fact, with very rare exceptions, that those children who come from the extreme limits of the district are the most regular, the most punctual, and usually the best-prepared, while those who reside within short distances are the most irregular in the district. Physiological considerations render the question of distance, within a reasonable limit, less important than some tender parents imagine.

A Union Graded School may be defined to be a combination of two or more departments, of different grades, wherein pupils are placed according to their merits and attainments; where the course of instruction in each department is arranged with reference to the others, higher or lower, and the whole under one system of discipline and instruction. Here is a machine of more or less complicated structure, according to the number of pupils to be instructed and the number of divisions needed. It is systematically arranged in order to save time, labor, and money, and must be so understood in its general design and operation by the people that they will have confidence in it as a system suited to their wants. No board of directors, however enlightened, enterprising, and energetic, can carry on a Union Graded School without the people understand the principles on which it should be conducted. The prejudices of early education are generally against it, since it is not according to the established order of things twenty years ago; many parents are in opposition to it, since it assumes to give a systematic direction in course of study, and in other matters assumes to control what under the former dispensation was left entirely to the wisdom of the parent or the whim of the child.

It must be expected in a new and somewhat complicated system of instruction, involving so many interested parties, that unless each knows its own duties there will be misunderstanding, collision, friction, and derangement. Disturbance by any one of the parties produces a disturbance of the entire system. Each should become acquainted with the conditions necessary to success, that all may work harmoniously to secure the result.

A Forcible Truth Forcibly Put.— The mobs, the riots, the burnings, the lynchings, perpetrated by *the men* of the present day are perpetrated because of their vicious or defective education when *children*. We see and feel the havoc and the ravage of their tiger passions now, when they are full-grown, but it was years ago when they were whelped and suckled. Kent.

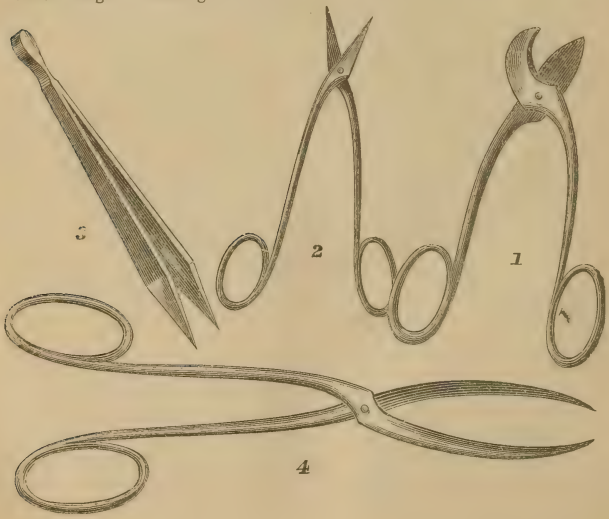
TAXIDERMY.

DIRECTIONS FOR COLLECTING AND PRESERVING SPECIMENS IN ORNITHOLOGY.

BY R. H. HOLDER, BLOOMINGTON, ILL.

In this paper upon preserving and mounting birds, prepared in accordance with a resolution of the Natural-History Society, passed at its annual meeting in July, 1861, I have endeavored to make the process as easily understood as possible, by a plain account of my manner of operation, with illustrations of all the important portions of operator and subject. But with the most elaborate article and series of illustrations, it requires much practice and some artistic taste, to succeed in mounting birds successfully; though almost any one, with a little practice, may prepare specimens for exchange or study.

Tools and Materials.— Supposing you to possess a suitable gun, your next requisite is shot of a proper size for the particular specimens you wish to procure; though it is better to be provided with several sizes, say Nos. 6, 8, and 10,— the latter being suitable for Warblers and other small birds. For Humming-birds sift No. 10 through a common meal-sieve: you can always procure to each pound a few charges of *dust* shot, with which, by choosing proper distance, you may obtain these diminutive creatures with little injury. A basket such as used by fishermen, and called a 'trout-basket', is best for carrying specimens, as you can lay in birds without danger of breaking the feathers.



Instruments necessary for skinning are a sharp knife, a pair of short-bladed sharp-pointed scissors (Fig. 2), a large, strong pair (Fig. 1), a pair of spring forceps (Fig. 3), and a pair with long blades (Fig. 4), a hook for suspending the bird while skinning, to be attached to a wire or strong twine and suspended from the wall, a shallow dish or tray to hold plaster of Paris.

Additional tools, for mounting, are a strong pair of wire-cutters, two or three sizes of plyers, needles, thread and twine; moss, such as found on rocks or old logs — soft and green is best — for small birds, and frost-cured prairie hay or blue-grass for larger; tow for filling out with, and cotton for various purposes — though the latter is to be avoided in all cases except in filling the throat and occiput, as hereafter described; annealed wire of various sizes, and for a preservative arsenic, for which there is no substitute, all preparations intended as such not being any more efficient, and requiring more labor and time to apply.

How to Treat a Bird when Shot.— Having wounded a bird, it is necessary that it be killed without further injury. To do this, open wide your right hand and carefully inclose him in it; then, with the thumb and fore-finger of the left placed under his wings, press upon his lungs until his struggles cease; plug the shot-holes and mouth with cotton, prepare a stiff paper cone, drop your bird in, head down, and neatly fold the end over the tail, and lay in your basket, taking care during the whole proceedings to avoid rumpling or breaking the feathers, as it will save you much after labor.



Fig. 5.

To Clean the Feathers.— Having brought your specimens home in good order and laid them upon the table, with the tools handy at your right hand and tray of plaster on the left, you pass a strong thread through the nostrils, remove the cotton from the mouth and put in fresh; with a sponge and clean water (a little warm is best) wash all blood and dirt from the feathers, then, with a moderately stiff brush (a hat- or soft hair-brush is best), apply the plaster, brushing briskly at the same time, until *perfectly dry*: by this means specimens may be restored that otherwise would be valueless.

How to Skin a Bird.—The bird is now ready for your knife, with the edge of which separate the feathers on the breast, and you will find a line bare of feathers, as if left by nature for this operation. With the fingers of the left hand keep the feathers back, while with the knife you cut through the *skin*, from the lower end of the breast-bone to the vent, as shown in Fig. 5; sprinkle a little plaster upon the exposed surface; now take hold of the skin with the fingers of the left hand, while you press against the body, with your forceps held in the right, as seen in Fig. 6. Having thus loosened the skin upon both sides, as low down as

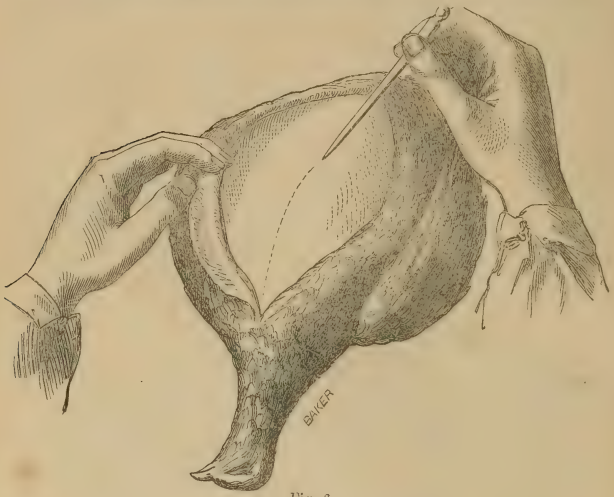


Fig. 6.

you conveniently can, place the thumb and fore-finger of your right hand upon the skin over the breast, press downward, and you will expose the whole of the breast to the neck; insert the hook, and suspend by cord; now take hold of the neck, pull upward, at the same time forcing your thumb and fore-finger under the neck, bringing it clear of the skin sufficiently to sever the neck, as seen in Fig. 7. Lay hold at the wing, pushing down, at the same time opening a place under the wing-bone with your fingers, in which place your scissors, and cut off at the shoulder, as seen in Fig. 8. Having cut off both wings in this manner, you now carefully separate the skin from the back, using great care as you reach the loins, as here it adheres so closely that it is easily torn. Now take hold of the leg, at the lower joint, with the left hand, and with the thumb and fore-finger of the right, on either side of the thigh, press down the skin, insert your scissors at the joint, and sever, as shown in Fig. 9. Then carefully force down the skin to the base of the tail, and cut off; remove the oil-sack and flesh adhering; next strip the legs of all flesh or fat, then take the wing-bone, draw out to the fore-arm, when with

your fingers force the skin down sufficiently to expose the flesh, and with your knife remove it, *not* separating the shafts of the feathers from the bone. In large birds, and especially in hawks, geese, etc., the wings can be more easily cleaned from the outside; making an incision the whole length of the fore-arm, on the under side, separate the skin and remove the flesh; the opening need not be sewed up.

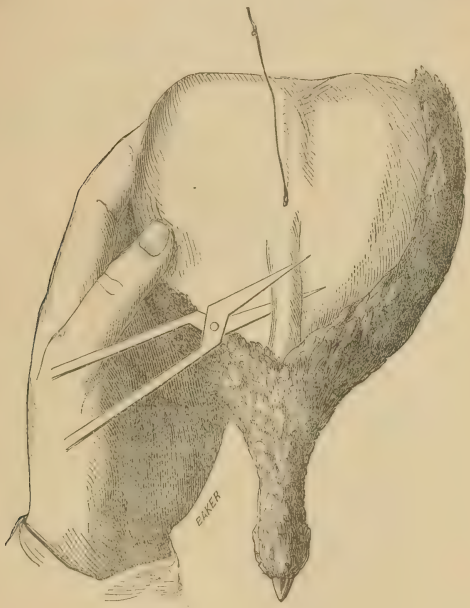


Fig. 7.

Having now reached the neck, take hold with your left hand, and with your right *strip* to the skull; here, carefully turning the skin, you reach the ears, which seize with your nails and *tear* out: then force down the skin, leaving bare the eyes, insert the point of your spring forceps in the socket, and work around, loosening the eye, then lift out and tear loose from the lids; next, with your knife, cut loose the tongue and separate the neck at the base of the skull; now, with your scissors, cut down each side of the jaw and through into the skull, removing the roof of the mouth and exposing the brain, which scoop out with your forceps; apply plenty of arsenic to all parts of the skin, especially about the head and the base of the tail; then fill the eye-sockets with cotton, turn back the head, being

careful to avoid stretching the skin, adjust the feathers, and your bird is ready for mounting, or to be made in form for exchange.

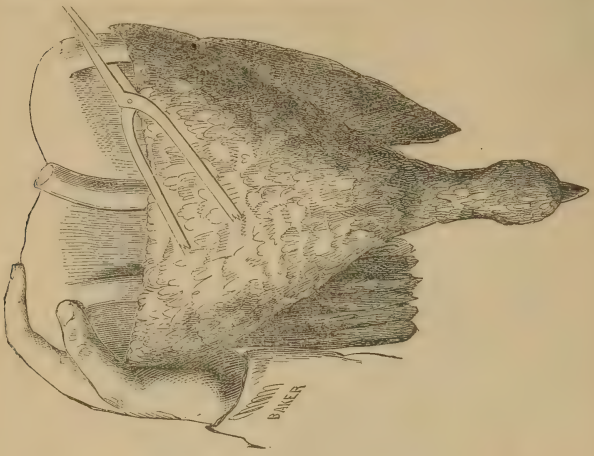


Fig. 8.

To Skin Ducks, Geese, and Cranes.— There are many birds, such as ducks, geese, cranes, etc., whose heads are too large to be drawn through the neck in the ordinary manner: with these proceed as with other birds, draw the neck through as far as possible, cut off, then separate the feathers on the throat, and and make an incision large enough for the head to pass through; then proceed as before directed, sew up the cut with fine thread and short stitches, and adjust the feathers. If proper care has been taken, the place of opening is not perceptible.

It must be understood that during the whole process of skinning there must be a free use of plaster as fast as new surface of flesh and fat is exposed; and very much of your success in making good skins depends upon this. In large birds that are very fat or oily you can baste strips of thick brown paper over the edges of the skin where you commence. Use corn-meal as an absorbent.

To Make a Skin for Exchange.— Having the skin off, you wish to prepare it for exchange. First pass a thread through the fore-arms of the wings, and tie close enough to bring the wings to their natural position, wrap some cotton around the leg-bones, and the skin is ready for filling, which is done in the following manner. Suppose your specimen to be a quail: you take a round stick, about a quarter of an inch in diameter, and rather longer than the body and outstretched legs; take some tow or cotton (the former is best) and wrap around the stick, forming the neck the natural length and size and the body as near the original shape and size as possible, having it rather smaller in preference to being larger; insert this in the body, the neck end of the stick entering the cavity of the skull;

take two or three stitches, just sufficient to hold the skin together, cross the legs over the stick and tie; pass a little cotton in the mouth to fill out the throat; tie the bill, place the head in a position as seen in Fig. 10, cut a narrow strip of paper and pin around the body, and lay away to dry.



Fig. 9.



Fig. 10.

Directions for Mounting — to Prepare Wire, etc.— Having the skin made, you wish to mount it. Select your wire, having it large enough to support the bird rather firmly, but not too large, or you will be unable to pass it up the legs without risk of injury. Cut off a piece about four times the length of the specimen, twist one end around a nail driven firmly into the wall; seize the other end with your plyers, and pull until you stretch it slightly; this will straighten it better than any other method. Cut into three pieces, making your cut obliquely, which gives you something of a point, and for most birds needs no further sharpening.

To Make the Body.— Take some hay, or moss, and wrap it well with thread, forming it with your fingers, at the same time, as near the size and shape of the

natural body as possible, preferring that it should be rather smaller than larger; cut off your winding-thread quite long, and with it arm a needle, and sew through the back at *a a a* in Fig. 11, which will make a sharp offset, giving room for the bone of the wing to lie in; run a wire through the body at the back, and with your forceps turn the end in so as to fasten; wind some cotton smoothly around the wire for a distance slightly exceeding the natural neck, but not any larger. (See Fig. 11.)

Let me impress upon the beginner these facts: you can not take too much pains in forming the body to get it the right size and shape, and if you make it a trifle too large you may as well throw the bird away, for you *can not* make it a good specimen.

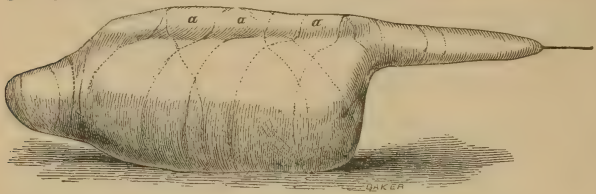


Fig. 11.

Where and How to Put in the Wires.— Take a wire and thrust it through the foot at the heel, passing up as close to the bone as possible through the feathered portion, turn back the skin, pass the wire up until a little past the end of the bone, wrap around both bone and wire cotton enough to fill out the thigh nearly as large as natural, draw back, and proceed with the other in the same manner.

Lay the bird upon its back, adjust the feathers, straighten the neck, take the artificial body in the right hand, and pass the wire of the neck up until it enters the skull; place the fingers of the left hand upon the head over where you expect the wire to come through (which should be the centre of the skull); work the

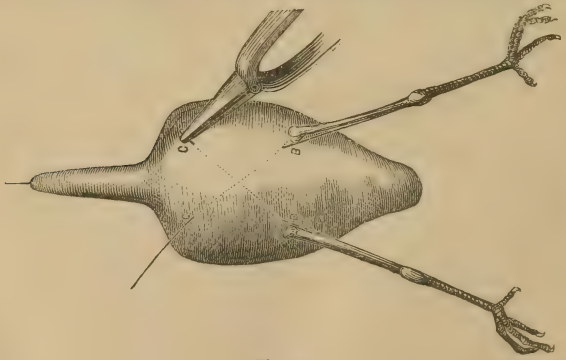


Fig. 12.

body slightly, so as to *drill* through, press it forward until in its place; now take hold of the leg and enter the wire a little forward of the centre of the body, pass it through and turn the ends in to fasten, as shown in Fig. 12.—B B showing the place of entering, and *c c* where they protrude and fasten.

To Sew up.—Bring the legs together a little and see whether the body looks full and round at the sides; if not, fill out with chopped tow, being careful not to fill too much so as to stretch the skin; take a worsted- or slender darning-needle, armed with strong cotton, and commence at the anus and sew up; a stitch every inch is close enough until you reach near the breast, when half that distance will be right; in cutting off your thread leave it two or three inches long, to be cut shorter after the bird is dry.

To Get the Wings into place.—Punch holes on your block, press through the leg-wires and fasten underneath; clasp the body with your hand and bring it to some where near the position you wish; next place your thumb under the wing and fingers over; seizing the arm-bone of the wing lift it up and tuck into the place made in the body to receive it; pull the feathers from under, at the same time forward and over the bend of the wing; pass a sharpened wire or long pin through and into the body; proceed with the other in the same manner; now take hold of the bill with the left hand, with the right firmly hold the body, push back with the left, until you bring it upright and near its natural position.



Fig. 13.

The beginner will find more difficulty in getting the wings properly in place than any other part of the operation; and unless this is done right it is impossible to make a bird look well. In lifting the wing into place be sure to get it high enough up, but not so high as to raise the scapulars, but so that they will lie smoothly over the fore-arm; also see that the wings are neither thrown too far forward nor too far back. The best direction I can give here is to study your specimen before you commence: see how far from end of tail the wings fold, and the same of the

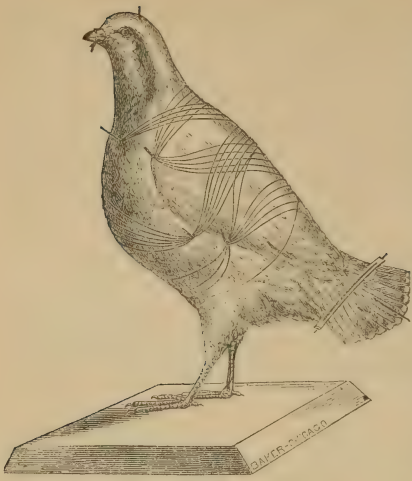


Fig. 14.

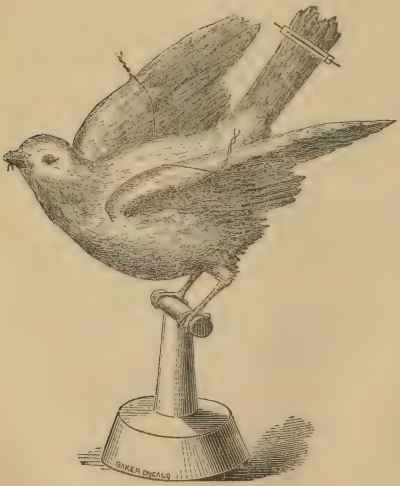


Fig. 15.

outstretched feet; make yourself familiar with the bird in every respect, when in the woods with its habits, and on your table with its relative proportions, and you will be less likely to caricature nature, as seen in most of our public collections.

To Fill out Throat and Breast.— Your bird is now, as shown in Fig. 13, with the throat and breast at E E E, not filled out sufficiently to the point marked F: take a wire and drag off a little cotton and pass through the mouth, continuing until you have given sufficient fullness, at the same time smoothing with your fingers and giving the rounded outlines of throat and breast.

How to Wrap a Bird. — Having already thrust one pin in the body *thro'* the wings, now enter one just *below*, about the middle of the body, one back of the leg, and one at the shoulder, as shown on Fig. 12; now wind some thread from one to the other, until you have secured the wings firmly in their place and bound down any feathers not disposed to be smooth; *use plenty of thread*, as with this you can do much toward making your bird smooth and symmetrical.

To Spread the Tail.— Take two narrow strips of card-board, and pass a wire through both ends of them and bend them together; with this clamp the tail, spread the feathers smoothly, twist the ends together, give it a little roundness, pass a wire between the clamps through into the body, and set tail in position as desired, as shown in Fig. 14.

To Mount in Flying Position.— To set up a bird in flying position, you first put the head in position, throwing it *up* more than in a resting position; place the bone of wing as before described; raise up the wing a little above horizontal, run a pin down the fore-arm into the body; now fill out the throat and breast, take a long pin or wire, and raising up the wing insert the pin *beneath* and another immediately over; stretch it out, see that every feather is in place, then twist the wires together, and bend so as to give the natural concavity of the wings; spread the tail, bending it up as shown in Fig. 15.

Further Directions for Mounting Cranes, Geese, etc.— In mounting cranes, geese, and all long-necked birds, proceed as before described, except that you fill out the breast with chopped tow to its full roundness before sewing up, as you can not introduce the cotton as directed for small birds; the throat is filled out as in others. With all large birds, in removing a piece of the skull and the flesh adhering for extracting the brain, the symmetry of the head is necessarily destroyed; to remedy which, introduce some cotton through the eye between the skin and skull, sufficient to restore the natural features.

Varnish the Legs.— It is a good plan to give the legs a light coat of varnish, as it prevents their scaling and protects them from insects.

To Prepare Dried Skins for Mounting.— Take a box large enough to receive the skins, and fill half full with clean fine sand, thoroughly moistened but not *wet;* lay in your skins and spread over a damp cloth, and set away for twenty-four hours, when they will be soft enough to remove the filling; then fill every portion with cotton well saturated with water; if a long-legged bird, also wrap the legs with wet cotton; set away for twenty four hours, when change the wet filling, dampen the covering-cloth, and set away again; on the third day they will ordinarily be ready for use, though quite small birds will take a little less and large a little more time. When ready to mount, remove the filling and fill with cotton wet with *hot* water, and let it remain an hour before mounting.

PROFESSOR ARNOLD GUYOT.

Our readers will notice on another page an announcement that a series of Mural or Wall Maps is about to be published under the direction of Professor Arnold Guyot, of the College of New Jersey, Princeton. This distinguished writer on physical geography, *facile princeps,* is personally known to a very large number of the teachers

in this state; and even the younger generation, who may not have received his oral instruction, as the older teachers have, must be well acquainted with his reputation.

It is now nearly fourteen years since he removed his residence from Neufchatel, in Switzerland, to Cambridge, Massachussetts, in company with his eminent friend and associate, Prof. Louis Agassiz. In the winter following his arrival in this country he delivered, in the hall of the Lowell Institute, a series of lectures upon Comparative Physical Geography, which may be said to have first directed the mind of the American public to a philosophical study of 'the life of the globe'. These lectures, having been given in French, were translated into English by President Felton, of Harvard College, and published as a volume under the title of 'Earth and Man'. In this form they have passed through many editions, in Europe as well as in this country, and have continued to be, up to this time, the very best manual of physical geography to be met with in any language.

Shortly after the delivery of this course of lectures the two Neufchatel professors, now neighbors within the shadow of the walls of 'fair Harvard', became associated with several American instructors as lecturers, under the auspices of the Massachusetts Board of Education, in the Teachers' Institutes of this state. We hope we shall not be considered as disparaging, in the slightest degree, the services of the other gentlemen, when we say that the lectures of Professor Guyot had a peculiarly quickening influence upon the minds of all who followed him. The subject of geography was one which every teacher of every grade expected to teach. Almost all who had made the attempt had been wearied with trying to impart a knowledge of 'the ten thousand useful facts' which, up to that time, had constituted the basis of the geographical text-books in New England.

Innumerable names of rivers, lakes, capes, and bays, taxing the memory beyond endurance, and common-place or trivial descriptions, constructed on no other apparent principle than that of giving a prescribed number of lines to each state, made tough work for teachers and pupils. We will not pretend to determine how much the text-books have improved since then, but of this we are certain, that Professor Guyot, by his lectures in this and other states, in Teachers' Institutes, and Normal Schools, and Colleges, has imbued the minds of intelligent teachers with different notions of geography from those which were formerly held. He has pointed out the relations of one part of the earth to another, of hemisphere to hemisphere, continent to continent, north to south, east to west; he has shown that the world, as much as the human body, exhibits design in all its members; that the air, the

ocean, and the land, act and reäct perpetually upon one another, fitting this 'terraqueous sphere' for all the wants of the human race; in short, that there is a 'life of the globe'— that THE EARTH is an organic whole, fitted, by all its structure, to be the home of MAN. These views, when first propounded, attracted attention almost as much from their novelty as from their profundity. We are glad that they are becoming familiar. Few teachers in this state, we trust, are now unacquainted with them: so that, whatever text-book they make use of, their classes are not left to wander without the guide of principle and law, in the ancient wilderness of miscellaneous facts.

None of the numerous followers and pupils of Humboldt and Ritter has entered more completely into the spirit of investigation which was evinced by those acknowledged masters, and none has developed in a more felicitous manner, or with more important additions, the views which they were foremost to announce. Having been their scholar in early life, Professor Guyot entered into their views with an enthusiasm which foreshadowed his later distinction. But he has never been their pupil merely: he early became an independent investigator of the laws of the natural world. The mountains and glaciers of his native land were his constant and favorite study before his removal to this country; and here he has lost no opportunity to become acquainted with the various mountain-ranges which constitute the Alleghany system, as it lines the Atlantic coast from Nova Scotia to Georgia. He has published in a recent number of the *American Journal of Science* the preliminary results of his measurements and surveys, illustrated by a map (first issued in Petermann's *Mitthulunger*). Strange as it may at first seem, this article and map constitute, as we believe, the only authentic general survey of the Apalachian chain which has ever been printed. Especially in the South, the barometric measurements which Professor Guyot personally made are the only trustworthy data which we have in respect to the higher peaks.

It will be seen by these remarks that we place the highest estimate on the labors of Professor Guyot. He is now in the full maturity of his powers. His education, his pursuits, his residence in Europe and this country, his philosophical mind, his enthusiasm, his attainments, and his acquaintance with the wants of teachers, fit him to be of eminent service to the educational interests of our country. We await, with appetites increased by delay, the maps which he has now promised.

We understand that in his recent trip to Europe Professor Guyot made particular inquiries in respect to the most approved methods of map-drawing; and, while the series now announced will be emphati-

cally his own, both in design and execution, the experience of other countries will not be overlooked or disregarded. Those who have seen something of the work assure us that for simplicity, clearness, and comprehensiveness, this series will leave nothing to be desired. It is constructed in a very different manner from the series of mural maps of which he published two or three some years ago, and which are now withdrawn from the market. Massachusetts Teacher.

COMPOSITION-WRITING.—NUMBER V.

By some such simple methods as those already presented, as well as various others that will readily suggest themselves to the ingenious teacher, we shall suppose that our juvenile class have progressed so far in the *ars scribendi* as to possess a sort of confidence in their ability to compose, together with a moderate fluency in the management of the simple requirements of an ordinary essay. They are all able, it is to be presumed, to discuss a suitable subject without any particular previous analysis or preparation for them by the teacher. Their topics are to be assigned, and they are expected, unaided, to expand them in thought and expression.

But what kind of themes shall be given? This is an important question, and upon an instructor's ability to answer it aright depends, in our opinion, in a great degree, his success in this exercise. If you select for them subjects far beyond their mental grasp, or involving ideas entirely foreign to their minds, you are in a fair way to excite disgust at the outstart, and call down juvenile blessings on your head in future years. For pupils at this stage we scarcely know which is the worse, to make them rely on themselves in despairing efforts to find a theme that will suit, or to distract their worried brains with a theme about which, to use their own language, 'they ca n't say the first thing'. The one is Scylla, and the other Charybdis; and both must be avoided. As our first suggestion, then, we might give the following:

Always be sure that the subject is adapted to the capacity of the scholar. If, however, you are a practical joker and fond of indulging in a little fun at your pupils' expense, suppose you distribute a list of topics something like these among your class: 'Lydia, you may take Freedom; Jarvis, Virtue; George, Patriotism; Frances, Truth; Nancy, Hope'. If woe-begone faces do not picture forth the anguish of ter-

ror-stricken hearts, then the countenance is not the mirror of the soul. Such a scene would furnish Willis's Parrhasius with as beautiful a death-agony as that famous painter caught from tortured age. Seriously, however, boys and girls should not be puzzled with abstractions. Their faculties are of too lively, practical, common-place a tendency to look long enough at things that have no substantial existence. It is far better to draw their themes from what they have seen and felt and heard, or from any sources concerning which they may be more or less informed. This leads naturally to our second suggestion:

Select such subjects, frequently, as may be connected with their studies. There are two advantages in this plan: they will feel not entirely at sea — that they are in possession of authorities in the shape of text-books which they can consult; and it has the effect of obliging them to reproduce their lessons in their thoughts, and thus impress them on their memories. To illustrate: here is an intermediate class that is studying Parley's History of the World. Now, you may confidently propose as a theme to the majority of them 'The Causes of the American Revolution', knowing that what might otherwise seem too elevated and dignified a question will not be considered by the scholars at all formidable, for the simple reason that they have heard the teacher expatiate on that very point, besides being somewhat familiar with it from previous study. Again: this class is at Geography; they have been repeating for months, perhaps, ad infinitum and ad nauseam, that the soil is fertile; the climate mild; agriculture in a backward state; that horses and sheep are raised in abundance; that cotton, figs, oranges and potatoes are the chief productions. Their heads are full of a confused jumble of physical facts. To give them an opportunity of sorting this medley, some times give a geographical topic. What countries have a mild climate, and their fruits? for example, will oblige the pupil to look over his Mitchell or Cornell, and classify his knowledge under that head.

We shall close by subjoining a sufficient number of historical and geographical themes to indicate our method, merely remarking that the plan may be applied to other studies, and that we shall pursue this branch of inquiry in our next.

Geographical: Where is coal found, and what kind of countries are they? (So all the minerals.) What do we eat that comes from abroad? What do we eat that comes from home? How would you go to London, describing the route and places passed through? What nations depend chiefly on agriculture, and their customs, etc.? on commerce? Name the principal wild animals of the United States, and briefly describe each; of Europe. The greatest natural curiosities in the world?

Historical: How many wars between England and the United States, and their causes? What settlements did the Spaniards make in America, and their object? The best monarchs of England. In how many ways has the Indian been made to leave his lands?

It will be seen that both these lists demand some examination of those portions of the respective sciences to which they refer. They are so framed that the pupil can not find his material ready made to his hands in the book before him, but must of necessity search and compare; and in this process lies the drill at which we aim. Be careful that in assigning the subject you are not too laconic, always giving explanations as to the course of thought you wish them to pursue.

STERLING, May, 1862. W. W. D.

THE OLD SCHOOLMASTER.

BY REV. WM. M. BLACKBURN.

VERY touching and beautiful were the words of the old schoolmaster as life passed away: "It is growing dark; the school may be dismissed." Down to the very gates of the unseen world he carried his love and regard for the children whom he had trained.

GOOD master was he in his chair,
In glasses and in gown;
And full two hundred days a year
He taught the hope of town.
Twice each cold day he made the fires,
And thrice he rung the bell,
And four times taught the sons of sires,
As he had done a score of squires,
To read and write and spell.

The lads all loved the good old man,
And he loved all the girls;
They cheered his name, or shouting ran,
And laughing tossed their curls.
Grand was his crown, his rough gray hair,—
He governed by his nod:
He read the Bible, led the prayer,
And all was solemn when the air
Calmed into the name of God.

They craved his blessing at the dawn,
His smiles were like the showers;
They loved his presence on the lawn,
They wreathed his hat with flowers.

They pressed him, nor would he denied.
To play with ball and bat.
At church it was their highest pride
To sit in silence on the side
Where the good master sat.

Joy kindled fresh on Monday morn,
He took the dusty tome
And hasted off, a teacher born,
The school-room was his home.
Day after day he did his work,
Did all upon the list.
And when the shadows reached his mark
He softly said "T is growing dark:
The school may be dismissed."

Full two-score years he taught the town
In good old-fashioned ways:
He toiled for God, then laid him down
To cease his life of praise.
That morn none saw him on the way:
No fire, no ringing bell,
No children on the lawn at play: —
No man who did not mourn that day
And sad forebodings tell.

The children came, they held their breath,
They took his hand in theirs;
They felt the chill of coming death,
They dewed his cheek with tears.
His shadows too had reached their mark,
The sun his cheek had kissed;
And as the good wife whispered — "Hark!"
He softly said "'T is growing dark;
The school may be dismissed."

Three-Rivers Reporter.

Simplicity.— Some able and excellent men are never able to get down to the level of children. A man of this class, a learned theological professor, was once engaged to address a Sabbath school. He read a number of verses from the Bible, and then said "Children, I intend to give you a summary of the truth taught in this portion of Scripture." Here the pastor touched him, and suggested that he had better explain to them what 'summary' meant. So he turned round, and said to the children "Your pastor wants me to explain what summary means, and I will do so. Well, children, summary is an *abbreviated synopsis* of a thing."

Christian Intelligencer.

ANSWER TO GRAMMATICAL QUERY ON NEAR, LIKE, WORTH, ETC.

Mr. John White Oak—*Dear Sir:* I see that in 'Notes and Queries' you put some hard questions at me. I send to the Editor of the *Teacher* an answer to Query 1, and will directly answer *you* on one of the others. I find a difficulty in answering such a question as is implied in No. 5, because I never use the word *govern* in writing upon grammar. When one says that a transitive verb governs the objective case, or governs a noun or pronoun in the objective case, I should say that a transitive verb is limited by the word denoting its object, and that such word takes the objective form, if it can have one. Hence, I should never say that an *adjective governs* a noun, but rather that the *adjective is limited* by the noun, if such case occurs at all, which is here the point in question. The prevalent opinion among grammarians seems to be that after *like*, *near*, *nigh*, and their comparatives and superlatives, an omission of the proposition *to* is allowed; but that in parsing or analyzing the omitted word must be restored. Hence they say that the noun or pronoun following is the object of the preposition understood. In my way of stating the question, I should say that it is disputed whether the limiting word limits the adjective or whether it limits an intervening preposition.

Now I do n't like the whim—for it is nothing better—that nothing but transitive verbs and prepositions can *govern* nouns and pronouns in the objective case, to use the common expression, or as I prefer to say, that only transitive verbals and prepositions can be limited by pronouns in the objective form, or by nouns in similar relation. If we refer to other languages to ascertain how the human mind has operated in the formation of them, we find that in Latin, Greek, and Romaic (Modern Greek), adjectives are said to govern cases without the intervention of a preposition: and while the French, Spanish, Italian and Portuguese do not follow the Latin in this respect, the northern languages, cognate with our own, do have exactly the same idiom; for in German, Danish, Dutch, and Swedish, languages which are cousins to ours, the words signifying *near*, *nigh*, and *like*, do not require intervening prepositions to show their relations to dependent words: the syntax of those languages is precisely what some English grammarians make ours to be when they say that *like*, *near* and *nigh* govern the nouns depending on them *without* a preposition understood. So far as those three words are concerned, I agree in substance with your quotation from the *Ladies' Repository.* So far as the word

worthy is concerned, I would apply the same principle and explanation, but say that the instances of such use of the word are so rare that they must be considered idiotisms or licenses, and not accordant with the almost universal usage of the language. I will presently take up the other word, *worth*, but first will quote to you the following passage from Dr. I. H. Nutting's *Analytic Grammar*.

"The third class of relations which the noun or pronoun may hold to other words is *the objective*. This is represented in the pronoun by the objective case, but takes the same form in the noun as the nominative. There are two classes of objective relations. (*a.*) The direct object, completing the idea affirmed by the transitive verb. (*b.*) The *remote object*, or object of a relation, usually expressed by a preposition. We have no prepositions, however, to express several relations, as those of duration, time when, and extent of space. The nouns denoting the measure of time, space, value, are the objects of relation: as, stay an *hour*, walk a *mile*, worth a *dollar*.

"Many words imply in themselves a relation to another object; as like, unlike, resemble, approach. Each of these requires an object to which the quality is directed. The relation, therefore, is obvious without a preposition; as, he is like (to) his father; he resembles his brother; he approaches the house; he leaves the city; he returns home. The relation exists not less in these cases than in others in which a preposition is necessary; and the noun is in the same construction as if the preposition was inserted. It is not, therefore, the *preposition* which governs the objective case, but the *modifying relation* in which the noun stands.

"This principle obviates the trouble which grammarians have felt in the exceptional cases to the rule 'Prepositions govern the objective case.' *Wells* styles these words independent by ellipsis, *Barrett and others* call them adverbs; neither of which statements is correct. Others state simply that they are in the objective case without a governing word. This is no more true than that the direct object is in the same condition. They are really governed as related objects by the word on which they depend. So, too, after like and unlike we are told the preposition *to* is understood. The *relation* is understood, but who understands the word? The fact in relation to the preposition seems to be that it is used if the relation would be ambiguous without it."

This statement of grammatical doctrine is as near right as we could expect from one who was hampered with the pressure of a necessity of

approximating his book to the received doctrines of grammar, and of using its terms. When we dismiss the term *case* from our grammars except as a relic of a past period of darkness, the principle can be more readily and more plainly stated. Meanwhile let us accept as our guide in difficult cases the principle that the relation in which a noun stands determines its 'case', whether with or without a preposition: if it modifies another term, whether that term be verb, adjective, adverb, or preposition, it is in the same class of grammatical relations that requires the object-form of pronouns, and is therefore to be called 'in the objective case', with the following exceptions: (1.) Appositives; (2.) Predicate attributes; (3.) Possessives; (4.) Nouns used adjectively, as *cannon-ball*, *ocean-steamer*, etc. In the cases under consideration, then, we can say that the relation of the words depending upon *next*, *like*, *near*, etc., is one of dependence, and that they are in the objective 'case', and 'governed' like other words in like relation, by the words which they modify or upon which they depend. On the same principle we dispose of all those words used with terms of measure, weight, distance, time, etc.; they are not independent at all, so that we can not agree with Mr. Wells in giving them that name; and if it be said that they are not objects at all, and therefore not *objectives*, we answer that they are as much so as the so-called objects of prepositions, which are said to be objects of *relations expressed* by the prepositions: these are objects of *relations not expsessed* but inferred from usage.

In discussing this matter of relations and the expression of them, I would mention the curious fact that all the transitive verbs in the Spanish language require a preposition to 'express the relation' between them and their objects, if the objects are nouns representing rational beings or personified objects; while in other cases the preposition is omitted.

Now what shall we say of *worth?* Those who undertake to class it have called it a noun, an adjective, and a preposition. It certainly can not be put with any of the other parts of speech as commonly reckoned, and we must class it as one of these, or say at once that it is so peculiar that it can not be classed, and must, as was said of a very odd man in our state, 'go in a gang by itself'. In favor of calling it a noun we find that there is a recognized noun, *worth*. (2.) We may consider it analogous to *hight*, *depth*, *weight*, etc., with the omission of an understood preposition, *in;* thus: "This lump of ore is in length 8 inches; in thickness and breadth 5 inches; in weight 40 lbs.; and (in) worth $500." In favor of calling it a preposition we find that it is said to show relation betwen the article valued and the price or

amount at which it is rated. But showing relation is not the function of prepositions only; and until grammarians can define prepositions properly and agree in their lists of them, we may well consider this reason worthless. (2.) It takes an objective after it. But this is disputed; Wells calls the following noun *independent* in stead of *objective:* and inasmuch as it is generally followed by a noun, we have not the opportunity to determine by the form of the word denoting the rate of valuation. But again, a sentence can be framed which will show that the following word is certainly objective: "Learning, wit, and wealth, are desirable; but wisdom is worth *them* all." This sentence is good English, and settles the 'case'. Against its ranking as a preposition is urged that is may be modified by an adverb: "It is *richly worth* a year's labor." But this can be matched with another example: "The star is *exactly over* our heads." The decisive objection to calling it a preposition is this: that it does not express a relation of that class which prepositions properly express, namely, relations of space.

Goold Brown does not include *worth* in his list of prepositions, nor notice it in his chapter on that class of words; but in his Syntax, after showing something of the conflict of opinion, he says, "As the whole appears to be *mere guess-work,* I see no good reason why *worth* is not a preposition." But as Brown does not define the word *preposition,* and classes as prepositions words which are not such, and tosses *worth* into the list only because it '*appears* to govern' an objective, his opinion is not worth much on this point. It is 'guess-work' with him, he admits.

In favor of calling *worth* an adjective, we find that adjectives denoting extent of space are modified by specifying terms as *worth* is: "It is 3 ft. high, 4 ft. long, 1 ft. thick"; here the adjectives are modified just as *worth* is modified by the rate of value. (2.) It may be modified by an adverb, as above shown. (3.) The German word *werth* agrees with our English *worth* in construction very closely, having a noun of the same form, and a derived adjective *wurdig* as we have *worthy;* and in German *werth* is an adjective, and is declined and compared as such. The construction of a cognate language should weigh much in settling a disputed point. (4.) *Worth* is used as an adjective, as said by Brown, who quotes an example from Young; and it is generally considered an adjective by those who write on language. It is objected that it can not be used to modify a noun directly; we can not say 'a worth man', but 'a worthy man'. In reply, there are several adjectives that are oftenest used in predication, and are never used before their nouns: such are *afraid, asleep, averse,*

awake, *akin*, *alike*, and some others; and in relation to its noun *worth* is quite like them: "This man, averse to notoriety; this family, akin to ours; this jewel, worth a fortune." *Nigh* and *near* are rarely before nouns.

I think that the preponderance of argument is in favor of the doctrine that *worth* is an adjective, of peculiar construction, and 'governing' or limited by an objective element.

I see that I have made a long letter, but I could not exhaust the subject in a much longer one, though I may have exhausted your patience by this. If you choose to pass it to the Editor of the *Teacher* as an answer to your inquiry, and he chooses to print it,—I hope his readers may not cry 'Mercy!' Yours,

SILAS WESTMAN.

SCHOOL EXERCISES.

QUESTIONS USED AT THE ANNUAL EXAMINATION OF THE CHICAGO SCHOOLS, MARCH 27, 1860 (SECOND GRADE QUESTIONS).

ARITHMETIC.—1. Divide one trillion ten billions two hundred thousand one hundred and twenty by one hundred and one millions and two hundred.

2. In one cubic yard how many cubic inches?

3. The distance from Chicago to Milwaukee is 90 miles. A, starting from Chicago, has traveled $\frac{1}{7}$ of the distance; and B, starting from Milwaukee, has traveled $\frac{2}{11}$ of the distance. How far is A from B?

4. Define Greatest Common Divisor and Least Common Dividend.

5. What is the greatest common divisor of 671, 2013, and 4026?

6. Two men bought a barrel of flour; one paid $3\frac{1}{2}$ dollars and the other paid $3\frac{3}{7}$ dollars. What part of the flour should each of them have?

7. A farmer being asked how many sheep he had, answered that he had them in four pastures; in the first he had $\frac{1}{3}$ of his flock; in the second, $\frac{1}{4}$; in the third, $\frac{1}{8}$; and in the fourth, 15. How many sheep had he?

ORAL COURSE.—1. What is the inertia of a body? Give an illustration.

2. What is the centre of gravity in a body?

3. Explain the process of flying.

4. Describe the barometer, and explain its use.

5. Describe the structure and office of the heart.
6. Give the structure and office of the lungs.
7. What is the composition of carbonic acid?

GEOGRAPHY.—1. Name the principal places through which you would pass going by railroad from Portland to Chicago, through Canada.
2. What lakes are drained by the St. Lawrence?
3. Describe the climate of Mexico.
4. Which are the Greater Antilles?
5. What kind of people live on the banks of the Orinoco river?
6. In shipping a cargo of wheat from Odessa to Marseilles, through what waters would you pass?
7. Draw an outline-map of South America, with its principal rivers and mountains.

(THIRD GRADE QUESTIONS.)

ARITHMETIC.—1. Multiply one billion one hundred and one thousand and two by two millions three hundred and one.
2. If the remainder is 17, the quotient 610, and the dividend 45767, what is the divisor?
3. Write the Table for Linear Measure.
4. In three square miles how many square inches?
5. The salary of a clergyman is $1000, and his yearly expenses are $850. If he is now worth $1350, in how many years will he be worth $2850?
6. A merchant bought 1000 bbls. of flour for $4500. He then sold 450 bbls. for $2250, and the remainder at cost. How much did he make by the transaction?
7. A man bought a cask of wine containing 75 gallons. Two-sevenths of it leaked out, and he sold the remainder for one dollar a gallon. How much did he sell it for?

ORAL COURSE.—1. Describe the Pyramids of Egypt.
2. Give a brief account of the Crusades.
3. Name two or more good conductors of electricity; two or more good non-conductors.
4. Describe the magnetic needle.
5. Give some account of common limestone.
6. Which are the most useful of metals?
7. What can you say of brass?

GEOGRAPHY.—1. How does the outline of North America differ from that of South America?
2. Why has the Arctic Ocean been so perseveringly explored?

3. What three mountain systems are there in North America?
4. What lake does the Kennebec river drain?
5. Name seven of the principal cities in the State of New York.
6. Name eight of the principal branches of the Mississippi river.
7. Draw an outline-map of the Southern States, with their principal rivers.

CLARK'S SYSTEM OF DIAGRAMS.*

English Grammar is one of the branches usually taught in the schools of our country, both in the common and the high schools. Then the question naturally arises in the mind of every intelligent teacher, What is the best course to pursue in presenting this science to the minds of pupils, especially young pupils? Is it better for me and for the pupils of my school to have the principles of grammar taught by the system of diagrams referred to above?

Now there are many good teachers who adopt the system of diagrams, but for what purpose I confess I never could see. It would benefit me perhaps, greatly please me at least, if some one who uses these diagrams would let us know the advantages gained by diagrams over the common method of teaching grammar, or the method without diagrams. Do those who use diagrams teach pupils to analyze sentences *before* placing them *in* diagrams? If they do, of what benefit is the diagram when the pupil can analyze the sentence without it? Or do they teach their pupils to analyze *after* the sentences are *in* the diagrams? If *after*, I would ask *Can* the pupil place the sentence correctly in the diagram without knowing how to analyze it? Of course the answer would be He can not. Then he must know how to analyze before placing it there; and the conclusion is as before: the diagram is of no benefit when the sentence must be analyzed without it; or, if *driven* to the necessity of saying we teach pupils how to analyze *after* placing sentences in diagrams, we have the idea that the diagrams are a kind of machinery by which the analysis of sentences may be *ground* out by pupils and they not know how it is done.

* Our pages, as a general rule, are not open to attack any school-book or system of books, except when it is done with the design of discussing *a method of instruction*. *What to teach* in any given branch may generally be learned from the text-books in use: *how to teach* can be discussed in the pages of the *Teacher*. Will some one give a clear and concise statement of the principle intended to be represented in conveying the relations of words to each other by means of diagrams?

Ed. Teacher.

But perhaps the answer is We teach our pupils to place the sentence in the diagram and analyze at the same time; which would be open to the objections urged above. Some teachers say We use the diagram for the purpose of assisting the memory: by having the diagram to look at there is less to remember. But the objection to that is that, grammar being a mental science, we should teach it *mentally*, and not by written figures or diagrams. We do not use the slate and pencil when studying mental arithmetic: neither should we when studying *mental grammar*. If it is beneficial for pupils to study *mental science* of numbers, surely it is to study *mental science* of language. The philosophy of mind should be studied by the mind, and not by machinery.

Take the boy or girl who never analyzed a sentence in any other way than by the use of diagrams, call upon him or her to analyze a sentence where there is no opportunity of getting hold of any thing with which to draw a diagram, and he or she will *fail*. Then we see at once that they have no practicable benefit or knowledge of the science of the English language. It is astonishing, too, to see *teachers*, when called upon (for a little information, perhaps) to analyze a sentence, have to hunt up a pencil, fumble round for a piece of paper, and go through a number of *physical* exercises, before they can perform a *little* mental operation.

LEROY CARPENTER.

PLYMOUTH, ILLINOIS, *May*, 1862.

THE BASKET OF FRAGMENTS.

GENIUS AND LABOR.—Alexander Hamilton once said to an intimate friend, "Men give me some credit for genius. All the genius that I have lies just in this: When I have a subject in hand I study it profoundly. Day and night it is before me. I explore it in all its bearings. My mind becomes pervaded with it. Then the effort which I make is what the people are pleased to call the fruits of genius. It is the fruits of labor and thought."

Mr. Webster once replied to a gentleman who pressed him to speak on a subject of great importance, "The subject interests me deeply, but I have not time. There, sir," pointing to a huge pile of letters on the table, "is a pile of unanswered letters, to which I must reply before the close of the session (which was then three days off). I have not time to master the subject so as to do it justice."

"But, Mr. Webster, a few words from you would do much to awaken public attention to it."

"If there be so much weight in my words as you represent, it is because I do not allow myself to speak on any subject till I have imbued my mind with it."

Demosthenes was once urged to speak on a great and sudden emergency. "I am not prepared." said he, and obstinately refused.

The law of labor is equally binding on genius and mediocrity.

How the Turkey was Named.— An English writer says that in the time of Henry VIII every thing foreign that was new and fashionable was called 'turkey', as the richest goods were imported by merchants whose vessels sailed up the Mediterranean, and who were called Turkey merchants. When the noble American bird was first served up on an English table its excellence gave it the fashionable name 'turkey', which has remained unchanged up to this time.

Sunlight in Houses.—It has been established by careful observation that where sunlight penetrates all the rooms of a dwelling the inmates are less liable to sickness than where the apartments are deprived of its health-invigorating influences. Basement rooms are the nurseries of indisposition. It is a gross mistake to compel human beings to reside partially under ground. There is a defective condition of the air in such rooms, connected with dampness, besides the decomposing paint on the walls and the escape of noxious gases from pipes and drains. All school-rooms, especially, should be open to the sunlight; yet, as a general thing, they are darkened like a parlor.

Cheap Microscope.—An obscure Englishman has anticipated Yankee genius in cheapening that beautiful and useful instrument, the microscope, for the benefit of the million. There is a man who some times stands in Leicester square, London, who sells microscopes at a penny each. They are made of a common pill-box, the bottom taken out and a piece of window-glass substituted. A small eye-hole is bored in the lid, and thereon is placed the lens, the whole apparatus being painted black. These microscopes are quite as effective as much more costly instruments sold in the shops. An eminent microscopist, who examined some of them, found that their magnifying power was twenty diameters. The cost of a lens of such a power made of glass would be seventy-five cents or a dollar. On cutting one of them in two, it appeared that the lens was made of Canada balsam, a transparent gum. The balsam had been heated, and carefully dropped into the eye-hole of the pill-box. It then assumed the proper size, shape, transparency, and polish, of a very well ground glass lens.

MATHEMATICAL.

ANSWERS—*To B.'s Questions in June Teacher.*—"What is a Compound Number?" A Compound Number is a concrete number whose value is expressed by two or more different denominations, which have the same general nature. Friend B. will find that Prof. Davies uses the term 'compound denominate number' on page 96 of his Common-School Arithmetic, which is equivalent.

1. $12.375 is a compound number, according to Davies, Robinson, Ray, Thomson, Adams, and Eaton.

2. We can not multiply one compound number by another; for in both simple and compound multiplication the multiplier is always, and necessarily, an abstract number. In the examples given by B the multiplier must be reduced to a simple number and regarded as abstract.

3. It is proper to say 'multiply the length by the breadth'; and it is the exact language of Robinson's and Thomson's rules for finding the area of a square or rectangle. M. V. B. S.

SOLUTION.—XVIII. 10A.=1600P.; $\sqrt{1600}$=40P., the length of side; $\frac{1}{2}$ of 40P. (the length of side)=330ft.÷6=55, the number of swaths round the field required to cut it. 55÷3=18$\frac{1}{3}$; hence A mows 19 swaths, B 18, and C 18. Then, by Arithmetical Progression, A cuts 3A. 1R. 13$\frac{8}{11}$P.; B cuts 3A. 1R. 13$\frac{19}{121}$P.; C cuts 3A. 0R. 34$\frac{14}{121}$P. M. V. B. S.

PROBLEM XIX. Into a cubic cistern 8 feet deep, and having an unknown leak, water is poured from two pumps, worked by A and B. They pump together till the cistern is half filled, when B falls asleep; but A continues pumping till it is three-quarters full, and then goes away. B, on waking, finds the cistern still half full, and pumps till it is again three-quarters filled, and then goes to look for A. They return together, and find the water 1$\frac{1}{2}$ inches lower than when B left. The leak is then discovered and stopped; and they then fill the cistern. If a cubic foot of water contains 15$\frac{5}{8}$ gallons, and the whole time was 10$\frac{1}{2}$ hours, and B pumped alone twice as long as A, what was the quantity thrown in per hour by each pump? the leakage per hour? the whole quantity pumped by each individual? and how long did B sleep? J. W. P. S.

OFFICIAL DEPARTMENT.

OFFICE OF PUBLIC INSTRUCTION,
Springfield, Ill., July, 1862.

CODE OF PUBLIC INSTRUCTION.

I PROPOSE at an early day to publish a work containing a succinct history of common-school legislation in Illinois, from its admission as a state to the adoption of the present system of public instruction in 1855; a digest of the decisions of the Supreme Court and of all the State Superintendents from 1855 to the present time; comments on the whole of the Common-School Act now in force, by sections, to elucidate its meaning more fully and to convey more readily detailed instruction to school-officers and others in their practical duties; papers on the philosophy and practice of teaching and the best methods of arranging conducting and governing schools; all the legal forms and blanks required in the act, with minute directions for keeping township, district and other school records and accounts, and of conducting all other school business; a full and comprehensive code of practical rules and regulations for the discipline and government of schools, etc., etc.; a complete alphabetical index of the whole, for facility of reference.

Perceiving, as I thought, the great need and utility of such a work, I began, soon after entering upon the duties of this office, a systematic course of interpretation of the School Law, a careful study of former acts and of judicial authorities, and the collection of other necessary materials for its preparation. That there is a pressing demand for such a publication those who are familiar with our school system, and especially those concerned in its administration, will concede. Although our school-law will, in many respects, compare favorably with those of other states, yet no one who is unacquainted with its practical details can estimate the number and difficulty of the questions arising under it. Hitherto school-officers and others have had no guide but the Act itself, and the fugitive circulars of the Superintendent and the comparatively few decisions of the Supreme Court; while, for the innumerable questions and contingencies for which no statute can possibly provide, there have been no well-settled principles laid down, classified, and illustrated, for the guidance of those concerned,— none, at least, to which parties interested have had general access.

It will be the object of the proposed volume to supply this want— to place in the hands of all who are in any way connected with the control and management of schools, school-funds, and other school

business, a complete hand-book of reference, from which they may derive the necessary instruction in transactions relating to schools, and in which they may find, among the cases adjudicated and the legal and equitable principles unfolded and established, some that will be applicable to their own particular circumstances.

School-officers and others will thus, it is hoped and believed, have always at hand the means of informing themselves in respect to their duties, and of adjusting their difficulties in a more thorough and satisfactory manner than can ordinarily be done by corresponding. This can not fail to conduce toward diminishing litigation with its attendant costs and evils: lessening the burden of official correspondence, and so affording the Superintendent more time to attend institutes, confer with teachers and school-officers, address the citizens on educational subjects, disseminate needful information among all classes, and thereby awaken or increase the interest of the people in the cause of common schools, and their attachment to our excellent system of public instruction.

It is of course impossible to prepare a manual that will meet all questions, or supersede the necessity of official correspondence. No such absurd expectation is entertained. Extraordinary cases, involving new combinations, and requiring the discussion and application of new principles or the modification of old ones, will continue to arise. But it is not unreasonable to believe that a work may be prepared so comprehensive in scope and specific in details as to meet, with more or less fullness, the great majority of points and questions that would otherwise be referred to the Superintendent. The advantage of having such a guide and expositor ever at hand, upon the table of every school-officer or board of officers in the state, can hardly be overestimated. Even in cases which may not be specifically described and determined in the proposed manual, parties will hardly fail to find therein some hint or general principle which will throw light upon the settlement of their difficulties and lead to a clearer understanding of their duties.

The incidental benefits hoped for are also of much importance. In seeking for the solution of a particular question, the attention will necessarily be attracted to many other points and questions, and thus the general knowledge of the inquirer will be enlarged; and as the unity and harmony of the system is perceived, and the force and reasonableness of the principles upon which it rests are apprehended, there will be a corresponding increase of interest, zeal, and efficiency of administration; for it is the universal history of free schools that prejudice and opposition yield to attachment and coöperation when,

by the general diffusion of knowledge among the people, the true character and manifest blessings of such schools are clearly perceived.

Practical utility will be the one aim of the work — to meet in the most direct manner the actual needs of school-officers and all others concerned; not to deal in mere theories and speculations. This end will be kept steadily in view and will control in its composition, plan and arrangement, from first to last. I shall endeavor to write upon plain practical subjects, in a plain practical manner, having no purpose or desire but to impart useful instruction, and that in such a way as to be understood. Simplicity of language and directness of method are believed to be the most valuable qualities in a work of this kind.

Conformably with this purpose, in the discussion of legal points technicalities will, as far as possible, be avoided. No pains will be spared to render the legal opinions which may be advanced on all school-questions trustworthy and reliable, while the discussion of the general principles, policy and usages of schools will, it is hoped, be of value to attorneys and others engaged in prosecuting or defending suits arising under the common-school laws of the state.

The classification chosen for the legal department of the work will be that suggested by the Act itself; which, besides being most familiar, would seem to be as appropriate and simple as any other. Territorially considered, our system concerns — The State; The County; The Township; The District. Following this order, with the necessary extension to complete the survey, this part of the work will embrace the following subdivisions:

I. State Superintendent: his election, powers, and duties.

II. School Commissioners: their election, powers, and duties; decisions, remarks and suggestions relating to them.

III. Township Trustees: their election, powers, and duties; decisions, etc., relating to them.

IV. Township Treasurers: their appointment, powers, and duties; decisions, etc., relating to them.

V. School Directors: their election, powers, and duties; decisions, etc., relating to them.

VI. Teachers: their employment, rights, and duties: decisions, etc., relating to them.

VII. Parents: their rights and duties in relation to the public schools: decisions, etc., relating to them.

VIII. Miscellaneous matters, not properly embraced under any of the preceding heads.

In addition to the general index, there will be a special index for each of these departments, so that any one may without a moment's delay turn to the desired subject and page.

The above is a brief general outline of the proposed *Code of Public Instruction*. It is respectfully submitted to the friends of common schools in Illinois, in the hope of receiving such hints and suggestions as will enable me to render it as perfect as possible, to the end that it may be as useful as possible. The work is not so far advanced but that any desired changes in the plan, arrangement, etc., can still be introduced. I shall be very glad to hear from all who have practical suggestions to offer; for, as already intimated, there is nothing to deter from the grateful acceptance of any contribution designed to promote the end in view, which is to place in the hands of all who are in any capacity or in any manner concerned or interested in our beneficent system of free schools a plain, practical, comprehensive manual, from which they may learn its nature, agencies, the details of its operation, and the legal and equitable principles upon which it must be administered, and by which all who are or may be concerned in its management must be controlled.

CORRECTION.

In the blanks for the statistical reports of township treasurers, recently issued from this office, the word '*county*', in item 'F', should have been 'TOWNSHIP'. The error was not perceived by the proof-reader. The true reading is "Longest time any teacher in the township has taught the same school." School Commissioners will confer a special favor by calling the attention of the treasurers in their respective counties to this correction.

NEWTON BATEMAN, Sup't Public Instruction.

THE REDEEMING POWER OF COMMON SCHOOLS.—If all our schools were under the charge of teachers possessing what I regard as the right intellectual and moral qualifications, and if all the children of the community were brought under the influence of these schools for ten months in the year, I think that the work of training up the whole community to intelligence and virtue would be accomplished as completely as any human end can be attained by human means.

Rev. JACOB ABBOTT.

EDITOR'S TABLE.

EDITOR'S CHAIR.

THE TEACHERS' PROFESSION.— As the time for the Third Examination of Teachers for the Illinois State Professional Diploma is rapidly approaching, we are impelled to offer some suggestions upon the subject. Complaints have often been uttered that the state manifested too little interest in the welfare of the teachers as a class; and unless something was done to render them more efficient, the system of common schools would fail to accomplish all that its friends anticipated from its organization. There was a loud demand for a special professional education, which was resisted by many, who claimed that those who desired to become teachers should make the same efforts to qualify themselves for their intended work as the lawyer, the doctor, or the blacksmith, and that the state had no right to give special benefits to one class at the expense of the rest. But the objection, however plausible, was overruled; and after a long, earnest effort, we point to our State Normal University as an accomplished fact — a thing of beauty, and of benefit and blessing to the state. If we waited long and worked hard to achieve it, we have now the more reason to rejoice at its accomplishment. The schools of the state may now be furnished with regularly-trained men and women, who go into the business knowing what is to be done and how to do it. We have reason to be proud of so much progress.

But there is a class of teachers in the field who have never enjoyed the opportunities of instruction afforded by the Normal School, but are, however, worthy of respectful consideration. For the special benefit of such the state had done nothing, and complaint has frequently been uttered that while the younger set have the opportunity of special professional preparation, those already occupying the highest stations were unrecognized. To obviate this difficulty, and place those who are really worthy and competent in as high a position professionally as those who have had superior opportunities, a law was passed authorizing the head of the Department of Public Instruction to issue Diplomas to such persons as should give evidence of good moral character, and stand such an examination as would demonstrate his or her fitness to receive it, as evidence of learning and skill. Such a law was recommended by the State Teachers' Association, and under it two examinations have been held.

The State Superintendent has received gratifying letters from high authorities out of the state congratulating him upon the progress made by the recognition of teaching as a profession. Illinois has taken the lead of her sister states in this matter, and it is hoped that others will soon follow.

Some thirty or more persons have received the State Teachers' Certificate of professional fitness for the work, and their next opportunity to increase the list will be offered on Wednesday, the 6th of August, commencing at 9 o'clock, in the City of Springfield.

There are many teachers who can not afford to stay away from this examination; not, perhaps, in a personal or pecuniary sense, but because of the influence their action will have upon those who need a stimulus to urge them to make greater efforts at personal improvement and professional excellence. We can do good by setting a good example; and it should be a matter of duty on the part of every one who recognizes teaching as one of the greatest means of doing good to leave nothing unattempted which will extend the moral and personal influence of this class. It is related that a young man asked the advice of Mr. Webster concerning the wisdom of studying for the practice of law, and whether the profession did not already number more than could be supported. Mr. Webster replied "There is plenty of room up stairs."

It is evident that there are plenty of teachers, but of these comparatively few are able to occupy 'up stairs'. No one who has the ability to go up higher should occupy the lower story. It is to be hoped that a large attendance of ladies and gentlemen will be witnessed at the coming examination, and that a large addition will be made to the list of those who are proud to enroll themselves as LEGALLY-RECOGNIZED PROFESSIONAL INSTRUCTORS.

WESTERN SCHOOLS.—In the Chicago *Evening Journal*, of the 24th of May, we find the following merited compliment to Western schools:

While at Peoria, a day or two since, Hon. Edward Everett visited the High School, and in the course of a short address to the pupils took occasion to remark that from what he saw of Western schools during his present tour he thought they were in no way inferior to those of the Eastern states. The compliment, coming from so good a judge and so competent a source, will be duly appreciated.

This compliment speaks well, not only for the educators of Illinois, but also for the untiring efforts of the State Superintendent. Though we have not had the pleasure of a personal acquaintance, yet it is our belief, gathered from conversation with his co-workers, that he has labored assiduously to elevate the standard of education in Illinois to a point inferior to no state in the Union; and the above remark, from the lips of *the* American scholar, is a just tribute to his success — a glittering jewel added to his coronet of fame. Illinois has a liberal public-school fund, and able and ardent workers in the field; and no cogent reason can be assigned why she should not stand first in the cause which is to be the corner-stone of her future greatness. No system, political or financial, which tends to develop the wealth and resources of a state can prosper when the interests of education are neglected. Mind is the motive-power, and only through its development can the enjoyment of material wealth be attained. To accomplish this two things are requisite: educators who are thoroughly competent and devoted to their work, and such a revolution in public sentiment as will seek to sustain rather than impede their efforts. It is not sufficient for the educator that he has been instructed in all the departments of modern lore, that his mind is a store-house of gems, but that he also have the faculty of imparting. It is not sufficient that he grasps a principle in its length and breadth, that he is satisfied that his own de-

ductions are correct, but that he be able to demonstrate to less tutored minds the reason of his belief. This is doubtless the most difficult task of the educator. Does the mind of the student reason *a priori*, *a posteriori*, or by analogy? is a question for him to settle, so that he may present the subject-matter in the light easiest to be comprehended. The one method is not to be preferred over the other; but the natural bent of the mind must be indulged. The renowned statesmen Webster and Calhoun, and the celebrated divine, Dr. Cummings, are prominent examples of these various methods of reasoning, in the order in which they are named; and yet it may be said that in the sphere in which they acted the one possessed no greater power than the other. As the mechanic adapts his tool to the character of the wood, so must the teacher adapt his teaching to the mind of the student. That the educators of Illinois have brought to their work more than an ordinary share of ability and competency is proved by the rapid strides which she has taken. And although the Eastern states are many years her senior, yet even now she compares favorably with the best. This feature is certainly gratifying and encouraging, and the result is commensurate with the effort. Of the unaided efforts of the teacher in combating a public sentiment that is entirely indifferent to his success, more anon. G. H. L.

It is a matter for congratulation that our Western schools are assuming a high position, and that our educational system is beginning to compare favorably with older and more favored states. It is also a matter of pride that we have at the head of our Department of Public Instruction a man who is entirely engrossed with the business of his office; who is a teacher by profession, and esteems no profession nobler or better. That Illinois schools should win praises from a man like Mr. Everett is certainly a most gratifying fact to our worthy Superintendent and all educational men; but lest the above article should appear to do injustice, we would state that the special excellence of the schools alluded to must be attributed, for the present, to the teachers and school-officers of that city, and remotely to our friend Col. Hovey, formerly Superintendent at Peoria, more recently Principal of the Normal University, and now at the head of his regiment fighting the rebels.

How the Lad was n't Cured of Swearing.—W. H. was an earnest, ingenious teacher, who tried to train up his pupils in the way they should go; but he had one, a bright, merry little rascal, who had contracted a habit of profane swearing, and was proof against all the ordinary modes of procedure for its prevention. The child sinned more from a spirit of habitual good nature than a design to be wicked. He was running over with an excess of young-animal health, vigor, and freshness, and it made itself manifest in a constant flow of laughing profanity. No remonstrances availed any thing for his improvement. One day a mouse was capering around, when the bump of Willy's mirthfulness was so disturbed that he was obliged to speak contrary to the directions of the decalogue. His teacher was in despair — what to do he knew not; but as a temporary punishment and to lead him away from temptation, he gave him a reproof for swearing, and then told him to take the tongs from the stove and go and sit in the corner in front of the mouse's hole and catch it. The child picked up the tongs and took his seat as directed, with as much gravity as his nature admitted. Soon the school settled

and things were moving along in the usual manner, nothing occuring to attract attention, and Willy was forgotten,— when all were suddenly aroused by the exclamation of the boy, "G—d, I've got him!" bringing down the house with roars of laughter, as he held the mouse firmly by the head, and brandishing the tongs displayed his trophy. He had to try again.

TAXIDERMY.— We publish an article from the pen of our friend Holder, of Bloomington, on the subject of stuffing birds. The author has done much for the cause of education and natural science by his liberal contributions of stuffed birds which adorn the Museum of the Illinois State Natural-History Society. This collection occupies a splendid suit of rooms in the building of the Normal University, affording to the students of that institution an admirable opportunity for the study of Natural Science and the cultivation of a taste for things beautiful and rare. The study of ornithology leads to a knowledge of the value of our birds and their preservation from willful, wanton destruction. Could our boys be taught to admire and study their habits and learn their usefulness, it would prevent much cruelty and secure to our agriculturists and gardeners their valuable services.

To every teacher we would say instruct your children to plant trees, to cultivate flowers, and cherish the birds.

It may be considered paradoxical to give directions how to destroy birds for the sake of their skins, and at the same time say the birds must be preserved for the sake of their beauty and song. Those who have tried the value of such teaching can appreciate the pleasure which our large school has enjoyed in watching the birds in our school-yard, particularly the labors of a pair of robins which has hatched and fledged a brood of nestlings within five feet of the window. There is poetry in it. Try it.

NEW HUDSON'S-BAY ANIMAL.— The captain of a whaler from the Shetland Isles has lately discovered an entirely new amphibious animal. It belongs to the mammifera, is shaped somewhat like the *tamanti*, *manatere*, and *dugong*, those singular tropical animals which form the link between the hippopotamus and the purely aquatic mammals; has paws like the bear, and, anomalously enough, eight of these, which spread out in the water, disclosing webs between the fingers; a triple eye-lid, like the crocodile, and a voice described as very plaintive; it spends its days on land, its nights in the water, and is thus invisible during the whole period of Arctic darkness. The captain has brought his prize to Shetland. It lives on seaweed, and thrives heartily. Journal of Education, C.W.

A NEW FOSSIL.— The discovery of the fossil bones of a new and gigantic saurian, in a cutting recently made for a railway near Poligny, France, has just been announced. The animal must have been between ninety and one hundred and twenty feet in length, and must have existed toward the end of the Triassic period.

MORTALITY FROM ILL VENTILATION OF SCHOOLS.— In consequence of the ill construction and bad ventilation of the school-houses in and about the city of London, England, seven thousand children, between the ages of five and fifteen years, annually lose their lives. Journal of Education, C.W.

Literary Borrowing.— We notice in the last number of our friend Atwater's publication, the *Teacher and Pupil's Friend*, an article taken from the June number of the *Teacher* without acknowledgment. An oversight, we presume.

Publisher's Notice.— In answer to numerous applications for back numbers of the current volume of the *Teacher* received during the past month, the publisher states that back numbers can not now be supplied. All subscriptions received since the first of June unavoidably begin with the July number.

LOCAL INTELLIGENCE.

Monmouth College.— We have received the Sixth Annual Circular and Catalogue of the officers and students of Monmouth College, for Academic year ending June 26, 1862. There are two courses of study in the Collegiate Department: Classical and Scientific. During the past year there have been 74 students in the Classical; 129 in the Scientific course; and 191 in the Preparatory Department: making in all 394 in attendance. Male and female pupils are admitted on the same terms. A fine building has recently been erected in a beautiful situation on the east of the town. This institution is under the control of the United-Presbyterian branch of the church, and also has a Theological Department connected with it. Rev. David A. Wallace, D.D., is President.

Rock Island Co. Teachers' Institute.— Agreeably to a call by the Executive Committee, the institute convened in the high-school building in Rock Island, Monday, April 7th, and remained in session five days. Comparing the numbers present and the interest manifested with that of the September session, 1861, it can safely be said that Rock Island county has an institute of her own.

Teachers and friends of education from all parts of the county were in attendance, not as idle spectators, but active, energetic co-workers in a good cause. Owing to inclement weather, the first day's attendance was not encouraging; but though the weather continued unfavorable all the week, it was not sufficient to prevent the attendance of a large and intelligent audience, filling the splendid room in which the institute was held, all the remaining days of the session.

The common-school branches received the greater amount of attention. Methods of teaching Spelling, Reading, Geography, Mental and Practical Arithmetic, Grammar, and Map-Drawing, were presented; while Theory and Practice and Object-Lessons received their due attention. These exercise were all conducted by our own teachers.

Discussions were had upon various topics, and resolutions adopted, among which were the following:

Resolved, That we, the members of this institute, are opposed to continuing the practice of corporal punishment in schools: that we will use our utmost powers to limit the practice to those cases where all other means absolutely fail, and that we will strive so to develop our own moral powers as to ultimately do away with it entirely.

Resolved, That we, the members of this institute, tender our hearty thanks to C. M. Hardy, our County Commissioner of Schools, for the candid and faithful manner in which he has labored for the improvement of the schools, and for the accuracy and fearlessness with which he has present-

ed their glaring defects and evils in his report; and we hereby, as a body, pledge him and the Board of Supervisors our undivided support in carrying out his suggestions relative to uniform series of text-books, by means of a convention of directors, as well as all other suggestions calculated to improve the schools of the county.

Resolved, That the members of this institute hereby express their disapprobation of all personalities in articles or essays read before this body.

Resolved, That we tender our sincere thanks to Prof. Wilber and to Mr. Thorpe for the interest they have taken in our institute, and for the material aid they have rendered us in making our sessions spirited and valuable.

Lectures were delivered evenings, by Hon. N. Bateman, Prof. Wilber, George Mixter, Esq., of Rock Island, and Rev. Oxnard, of Moline, Illinois.

A *corps* of editors were appointed to present a paper at our next session, articles for which are to be written by members of the institute on subjects relative to the profession, and forwarded to the editors for compilation.

The institute was a success; all were happy and all encouraged. It is good *paying* property to the county. S. B. HARDY, Secretary.

HENRY COUNTY boasts a group of good schools that stand quite alone in these times in some respects. We refer to the Galva, Kewanee and Geneseo schools. These have all been sustained well during the general depression. The policy has been to get good teachers and pay them well. The permanency of the corps of teachers at Galva, with the liberal policy of the board, has enabled that school to accomplish unusual results. The boards both at Kewanee and Galva have already, we are informed, taken a vote as to the length of school next year (the decision being for 10 months), and as far as practicable reëngaged their teachers. It would be well for some of our boards who change with every wind of public feeling to observe the results of permanency, with judicious liberality of policy, in the schools of Galva and Geneseo. The present position of matters at Kewanee is well spoken of, but radical changes were made too recently for the present administration to have achieved the results shown already in the other places.

Such schools are of some value to those striving for an education, and a good investment for the people of the county and towns supporting them. Want of permanency causes a very great waste of money and time in most of our schools.

S. T.

MCDONOUGH COUNTY INSTITUTE.—In March our first County Institute was organized at Macomb, and I have been expecting to see a notice of the meeting in the *Teacher;* but as it has not appeared, I will send you a brief outline of the proceedings. We met the 27th of March. 1st. Adoption of Constitution; exercises in Reading, Geography, Written Arithmetic, and Grammar, with discussion; lecture in the evening. 28th. Spelling; Grammar; essay on Mental Arithmetic; lecture on School Discipline; exercise in Geometry; business; resolutions, etc. And just here I wish to ask a question, Ought not exercises in the higher branches, as Geometry, to be excluded from County Institutes? It is seldom taught in common schools, and I do n't suppose half the teachers present ever studied that branch at all. In the evening we listened to a lecture on Education; then adjourned to the Randolph Hotel and spent a social hour.

The attendance was very good for a beginning, about sixty teachers being present; but we hope to do muchbetter in future. The next meeting is at Blandinville, August 18th. Yours respectfully, S.

It has been our design to notice every institute that has occurred this year in

the state, but in many cases our information has been gathered from exchanges in stead of the officers, who, we think, should furnish us this local intelligence. We gladly welcome all such news.

We think, with our lady correspondent, that Geometry and kindred branches are rather out of place in the first meeting of a Teachers' Institute. There is a greater deficiency in the teaching of the studies prescribed by the school-law than in the branches of the higher grade of schools. Young teachers should learn what they can use in the school-room, or the institute is not of much value to them.— Ed.

Mendota.— *Editor Ill. Teacher:* Notes from your Traveling Correspondent, in the last number of the *Teacher*, misrepresented us. Our schools are not independent of each other. On the east side of town we have two grades of schools; on the west side two grades; in the north district, which is small and isolated from the rest of the town, one grade. We have one grammar school, to which the more advanced pupils from all parts of the town are sent. We have employed seven teachers and enrolled 509 pupils during the last year.

If your correspondent had examined our library more carefully, he would have found several other works on the Theory and Practice of Teaching besides Ogden's, of which he seems to have a poor opinion.

May 20, 1862. Yours truly, MENDOTA.

[The above was received too late for the June number.— Ed.]

NOTICES OF BOOKS, ETC.

Analysis of the English Sentence. Designed for advanced classes in English By A. S. Welch, A.M., Principal of Michigan State Normal School. Improved edition. 12mo., pp. 267. New York: A. S. Barnes & Burr.

The reputation of Mr. Welch as an instructor would of itself almost insure his making a good work upon the subject of Grammar. The first edition of this work was highly approved by many of those best qualified to judge. Since then it has passed the ordeal of the school-room, and its merits have been practically tested. The present edition comes forth as the result of that test, revised and improved in those parts where experience has demonstrated a reconstruction necessary. We think it an admirable book for the advanced student of the English Sentence.

Sherwood's Writing Speller: Systematizing Written Spelling in Schools. Copy-book form. Retail price 10 cents; 80 cents per dozen.

Sherwood's Speller and Pronouncer: Containing Seventy Lessons composed of words in common use and of difficult orthography. Same price as above. Chicago: Geo. Sherwood, 118 Lake street.

The above books are admirably adapted to the purpose for which they are designed. The method of acquiring a knowledge of spelling by writing the words to be learned is approved by the most intelligent and successful teachers; and these books are well calculated to carry out the idea. Send for them.

ILLINOIS TEACHER.

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UNION GRADED SCHOOLS.—NUMBER IV.

ONE of the conditions necessary to the successful establishment of a Union Graded School is the erection of a suitable building. A complete building, constructed upon correct principles, in all that pertains to size, situation, plan, light, heat, and ventilation, is not absolutely indispensable to a tolerably good system of schools; but, other things being equal, that will certainly be the best school, conducing to mental, moral, physical and æsthetic excellence, which has the best accommodations for its pupils. A good school-building, furnished with all the appliances which good teaching and fine taste require, will cost less in the end than a house erected without reference to the purposes to which it is to be put. Economy of time, of teaching, of health, and of comfort, is promoted by building judiciously and with reference to the wants of the school. There have been many improvements in this branch of architecture within a few years, and yet a very large number of expensive houses have been erected which are of little real value, because more attention was paid to a showy display than to the necessities that should have governed in their construction.

And here a question arises which must be answered by the circumstances of each place organizing a Graded School. It is "Shall we have one house, or more?" In a district containing less than five hundred children, where the school can be placed in the centre, with not more than a mile's distance to the limits and no obstruction of stream or slough intervening, it would be better to have but one building. The chief objection to this plan, in the minds of many, would be that the distance is too great. Practically the objection is of no moment, as the experience of most teachers will affirm. Those who travel from the extreme limits are usually the most punctual and regular, while those who reside near the school are often the reverse. The reason for this will suggest itself to every thoughtful mind.

The advantages derived from gathering all the children of a district of that size in one house are many and great. The first we name is the pecuniary. One house and lot for the accommodation of five hundred children would be less expensive than five houses and five lots — four in the corners of the district and one in the centre. The improvements of one property would cost less in the beginning than of five; the insurance would be less; the keeping and cleaning would be less; and the number of teachers employed in the same house would be less than that required in several different houses. Another advantage would be that the grading of the pupils would be more accurate, and the discipline and government would be uniform throughout the whole. The influence of numbers would also be a great incentive to labor, both among teachers and pupils. The supervision of such a school would be comparatively easy, since all the teachers and pupils would be brought in daily contact with the principal. It would be almost impossible to secure uniformity of discipline and instruction in four or five schools, at considerable distance from each other, without employing too much time and at too great cost for the size of the district we are describing. The more the work can be concentrated, the better will it be done. Of course, if these principles apply to a district containing five hundred children, they will be equally applicable to districts containing a smaller number. But there are circumstances where this plan can not be carried out: as, for instance, in a district lying on both sides of a river. In that case a primary school would have to be erected on one side, while the more advanced pupils could cross to the larger and more advanced school on the other. The principle is, the more you can reduce the number of buildings the better; and in all exceptional cases common sense and the general principles recognized in the management of graded schools must govern.

And here we would suggest that no special law is necessary for the organization and management of such a system as we have been describing, or indeed of one twice as large. Much injury has been done in many cases by tinkering with the school-law. In cities like Chicago and Peoria there is a necessity for a different organization from that required in a city of five or six thousand inhabitants, or a village. In the cities named, and perhaps in some others in the state, a special organization is necessary to perfect the system of graded schools. Very few of our suggestions will be applicable to them.

When it is determined that a building shall be erected, it is a false economy to employ incompetent persons to plan and execute it. Get the best information that is to be had, even if it must be paid for at a high rate. Liberality at this stage of the work is true economy.

As there has been much said and written on the subject of school architecture, we will not consume space upon that subject at present.

In our next we shall speak of the principles which should govern in the *organization* of a Union Graded School.

RICHARD EDWARDS.

We have announced elsewhere that this gentleman was elected Principal of our State Normal University, at the last meeting of the Board of Education, in place of Col. Hovey, resigned. As he is comparatively a stranger in Illinois, a few facts regarding his previous life and career as a teacher will gratify our readers.

Mr. Edwards is by birth a Welshman, and is now about forty years of age. He came to this country with his father's family when quite a small boy, and settled in Northern Ohio. Here he lived, working on a farm and at the trade of a carpenter, studying and teaching district school, until he passed his majority. About this time, by the advice of some judicious friends, he went to Massachusetts, where, after teaching one term, he entered the State Normal School at Bridgewater. The school was then in charge of its first Principal, Nicholas Tillinghast, a man to whom the friends of Normal Schools in America owe as much as to any other for their past usefulness and present popularity.

After graduating here Mr. Edwards entered the Rensselaer Polytechnic Institute, at Troy, N. Y. When he had completed the course of study at this institution, he was called to Bridgewater to assist Mr. Tillinghast in the Normal School. Here he remained, associated with his old master, and teaching with eminent success, for five years; here he laid the foundation for his brilliant reputation as a Normal-School teacher. The wants of a growing family, and the offer of a largely-increased salary, induced him to remove from Bridgewater to take charge of the English High School for Boys in Salem, Mass.

Before he had been in this place one year, Rev. Dr. Sears, then Secretary of the State Board of Education, secured his services as a traveling agent for the Board. He labored in this capacity until the Fourth State Normal School in Massachusetts was established at Salem, and he was elected its first Principal. He held this position nearly four years, until, by repeated solicitation and the offer of $2500 per annum, he was induced to come west, and establish and take charge

of the City Normal School in St. Louis. Here he remained until the troubles of the past year began to cripple most disastrously the public schools of that city. The Normal and High Schools were united, and he was chosen Principal, although at a greatly-reduced salary.

Finding the condition of things somewhat discouraging in St. Louis, he consented in March last to take a place as Assistant in our State Normal School. When the Board of Education in St. Louis learned of the fact, they promptly offered him his old place in the Normal School, with his former salary; but he, considering the engagement to come to Illinois as having been fairly made, would not break it. At the close of the last term Mr. Bass, who had held the position of Principal since Mr. Hovey left, determined to return to his profession. In this juncture, the Board were so well convinced of Mr. Edwards's fitness for the place, both from his previous reputation and his success since his connection with the institution, that he was unanimously chosen as permanent Principal.

From the foregoing sketch it will be seen that probably no other man in the country has had an experience in Normal Schools so extended and so successful; and we look to see the anticipations of the Board, high as they are, fully realized.

COMPOSITION-WRITING.—Number VI.

We continue the discussion of suitable subjects for compositions from our last. We there recommended the selection of themes drawn from their studies, for the reason that by this method two objects are secured at once: the ordinary ends intended by composing, as well as a more thorough review of particular lessons. In fact, we have always considered this exercise as beneficial for the awakening of mind as for the elaboration of style, and have been governed by this principle in the choice of topics. Hence, except in the case of mere beginners, the questions to be assigned to my scholars must satisfy these two interrogatories: Do they understand it? Will it extend their knowledge? This last condition we consider indispensable, especially as pupils grow older. The boys and girls are numerous that can frame several very pretty sentences, gleaned from newspaper paragraphs or borrowed from the poets, about *Spring*, or *Summer*, or some of the other current sentimental texts. It is possible with such themes to sit down in a fit of dreamy inspiration and dash off a page of glittering romance which

shall not make the slightest draft on the intellectual powers of either the writer or reader. Of course this is good as far as it goes: the patient under this treatment, if nothing more, is at least enlarging his vocabulary, increasing his fluency. But give these same ready writers *The difference in character between people of warm and of temperate climates*, or something of a like didactic nature, and what a sudden paralysis arrests the before dashing pen! Their genial inspiration ceases, and they retire from the attempt in disgust. Why? Simply because thinking is irksome: they discover that rhapsodizing will not answer here, and to stern reflection they are indisposed. Believing, therefore, that the youthful mind has a natural capacity for superficial generalization, for fanciful flights of expression, without seeking its cultivation; that light literature is already flourishing most luxuriantly (vide *Ledger* and *Godey*), without fostering childish aspirations in that direction; and that as scholars manifest a great aversion to thinking they should by every means be trained to reconcile themselves to it; for these reasons we prefer to assign topics to our pupils that may not only afford a discipline in language but arouse to independent, vigorous research.

In our last we spoke of History and Geography as books from which instructive themes might be drawn. These, on the whole, will be found the only available studies for this purpose out of the seven or eight legal branches of the state, since the bare statements of Grammar or Arithmetic will of course not admit any amplification of idea or transposition of language on the part of an ordinary pupil. Where the higher sciences of Philosophy, Astronomy, Chemistry, Geology or Rhetoric are pursued, it will be easy to form quite a varied and entertaining list of topics, all bearing thus on departments with which the scholar is more or less acquainted, and yet at the same time prompting to investigate other and fuller sources for material to incorporate with what he may already know. As, however, we have been dealing thus far with schools confined to the common branches, we return to them.

We have already given one kind of subjects selected from History or Geography, or both combined. We shall now give another: it may be called Comparison. Examples: Compare ancient and modern Italy, or Greece; The West fifty years ago and now; The valleys of the Nile and the Mississippi; The vicinity of the Alps and of the Andes; The Chinese and the English. This catalogue, which can be widely extended, will be seen to afford a valuable drill for analysis and discrimination.

As a pleasant change, occasionally let the comparison exercise consist of a written debate: that is, let a question be given involving an

affirmative and a negative, and all the writers be equally divided between the two sides, reading in stead of speaking their efforts. Here are a few specimen questions, the simpler ones being intended for more youthful pupils: Which is the better, food that requires cooking, or that which is eaten raw? Is corn more useful than wheat? The potato, or the apple? Wood, or iron? Does Christmas afford more enjoyment than Fourth of July? Can a winter night furnish more pleasure than a summer day? Can a traveler find more entertainment in Europe than America? When the members come prepared to read their performances, that the affair may come off with eclat, affirmative and negative should alternate in the usual order. It is amusing to see the varying shades of admiration or despair that appear on the countenances of either party, as the arguments of its writers are good or bad and the prospects of victory promising or remote.

As assigning subjects is one of the most important features of composition-writing, and as we have more to say in regard to it, we shall continue our remarks next month. W. W. D.

Sterling, July, 1862.

SUBMISSION TO LAW.

[We have received two communications on the subject of the following article from remote parts of the state. They are almost identical in argument and very similar in illustration. We publish the one first received.—Ed. Teacher.]

Mr. Editor: In the address of Mr. Barge, published in the June number of the *Teacher*, there are some remarks on this subject which ought not to pass unchallenged.

He says "If a man's conscience be the recognized criterion of his duty and fealty to his government, in opposition to the decisions of courts and the enactments of Congress, there is at once an end to the stability and efficacy of all popular government." He then instances the fugitive-slave law, and says "if one may with impunity set this at defiance, another may evade the revenue law, and another violate the law interdicting the African slave-trade." Was ever a more distinct avowal of the ancient dogma of tyrants that 'kings can do no wrong'?

He then makes the bold assertion that "had these few fundamental constitutional truths been fully inculcated into the youthful mind, both at home and at school, and had these important principles been the

rule of practice with our law-makers, both ancient and modern, history would then have furnished no record of puritanical expulsion from their native land, nor of religious intolerance for opinion's sake, either in the old world or in the new."

Verily this is a great discovery! If the apostles of our Lord had only submitted to the mandates of their rulers and law-makers 'not to speak any more in this name', there would not have been the record that each one of them, with a single exception, suffered torture and martyrdom for opinion's sake. Had the primitive Christians been peaceable, law-abiding citizens, in stead of preaching Christ and him crucified in defiance of the mandates of cruel tyrants, those terrible massacres would never have been perpetrated upon them to the everlasting disgrace of unsanctified human nature. Had Luther only submitted to the bulls of Pope Leo X, and confessed his sins and asked forgiveness for the heinous crime of presuming to interpret the Bible for himself according to his own common sense, the burnings and tortures of 'heretics' which disgraced Europe in the sixteenth century would never have found a record in history. Had the nonconformists of England submitted to worship God in conformity with the Church of England, and not according to the dictates of their own consciences, the world would never have seen the record of that 'puritanical expulsion' which resulted in the settlement of New England. There is not the least doubt in the mind of any one who has candidly examined the subject that the germ of that liberty which the gentleman now enjoys was brought over in the Mayflower, and was developed and brought to maturity by that opposition to tyranny which he affects to deprecate so much.

These things being so, what is the rule by which we must walk in order to attain true happiness and liberty as a people? The apostles Peter and John, on trial before the magistrates for a breach of the laws, said "Whether it be right in the sight of God to hearken unto you more than unto God, judge ye; for we can not but speak the things which we have seen and heard." This must be the answer of every true Christian when asked to violate the commands of God and the dictates of his own conscience in the matter of the rendition of fugitives from bondage and oppression. And this principle does not by any means involve opposition to law in general, as the gentleman insists. Our Savior and his apostles counseled submission to the laws in every case where no violation of the 'supreme law' of the world was involved. Their disregard of the law which forbade them to preach did not lead them to disobey the law demanding tribute to the

Roman emperor. No more does the principle which underlies opposition to fugitive-slave enactments involve opposition to revenue laws. One involves *moral* principle in itself; the other does not.

I think that if our people were taught in their public schools and in the pulpits more reverence for the law of God, in stead of 'the constitution and the laws and treaties made in pursuance thereof', as the supreme law of the land, we should come nearer to the designation of that *happy* people whose God is the Lord. Had this been conscientiously taught in all parts of our land, we should never have been called upon to fit out armies to crush a rebellion started for the purpose of extending the area of human slavery.

It seems wonderful that in the middle of the nineteenth century there should be any who would hold so monstrous a doctrine as that sought to be refuted in this paper; and it can be accounted for only by the consideration of the innate depravity of the human heart. No human laws can supersede the law of God; and he only shall obtain the character of a true teacher who shall inculcate this principle in all his teachings, whether in the school-room or in the pulpit.

SELIS.

Our Rural School-Houses.—In all our travels we have found but very few that should not be indicted and burnt! Small, pent-up, unventilated, and furnished with back-breaking benches, they are as uninviting to the child as a prison, and should never be entered with either its own or any intelligent parent's consent. But this is not all: the exterior is almost universally as repulsive. Think of an old bald *red* school-house, when there are so many pleasing forms and colors that are just about as cheap. Think, too, of the location of most of our school-houses—stuck down in some low, quaggy spot, where it is impossible for children to be healthy, or up in bold relief on some barren knob, without a suitable inclosure, and without either a shade-tree or a flower-bed any where near. There it stands—the old red or unpainted shanty,—reared by stupid, stingy tax-payers, who see the advantage of building good barns for their horses, and cripple the bodies, and cramp and stint and disease the minds of their children, because they have no apparent cash value in the market!—a humiliating evidence of the short-sighted folly of the parents of our youth, and a burning shame and disgrace to the barbarian sentiment of the country.

Wisconsin Farmer.

ON UNDERSTANDING THINGS.

"I WILL believe nothing that I can not understand." said a very self-sufficient young clergyman, once. "Then, my dear sir, your creed will be the shortest of any person's I know." answered the gentleman to whom he spoke, to the silencing, it is to be hoped, of the shallow prater.

But such persons we continually meet, and it seems to me very often among teachers: at least, I often see at teachers' associations or institutes those who say "Teach nothing you can not make the pupil understand"; and I suppose they believe this: and then the above reply comes to my mind. As I lie out here upon the grass this bright afternoon, under the shade of this large apple-tree, and almost conceive that I *hear* the springing of the grass and the growing of the corn, I find my powers of understanding limited; and I must suppose those of the child to be so also. I can not with all my study understand how the grass grows from its tiny seed, or the tree puts forth leaf and bud and blossom, and loads itself with fruit. The botanist tells me, indeed, of germination — the radicle, the plumule,—and, going into chemistry, of starch and sugar and diastase, and of certain conditions necessary; but all these only talk *about* the thing, and do not tell the thing itself. I see this little ant, laboriously and busily dragging along a dead fly, so much larger than itself that its efforts seem preposterous, and I question it of its life, and of the life that but now animated the mass it is dragging homeward, but I can get no response. Kirby and Spence are equally at fault with the veriest infant. The former may indeed tell me more *facts*, but of reasons they and we are alike ignorant. I am hungry, and I ask for food; but the wisest physiologist can not tell me why that satisfies the desire, nor how the mysterious life that I feel throbbing within me is kept up by it. In his long discourse about chyme and chyle, and lacteals and blood, I detect only ignorance and not wisdom. I turn away to hide my face from the rays of the sun that have at last pierced my leafy screen, and I question the astronomer about that orb that with its silent influences binds unto itself this earth, and moons, and planets, and I hear of attraction, and centrifugal and centripetal forces, etc., etc.; but the reason is still not given, and I am still unsatisfied. And so in all sciences I find that we have at last to rest satisfied that certain things are *facts*, and never go beyond them. Perhaps in that higher and perfect manhood, to which this earth-life is the childhood, we may understand

more of these things; but even there I think we shall still find God unsearchable and his ways past finding out.

Now it seems to me that this very prating about understanding things, which is all very well in due time and season, is really at the bottom of a good deal of the shallowness of our day. Do not teach a child what it can not understand seems very plausible; but alas! in the endeavor to get things down to the child's comprehension the *life* is all taken out of them, and what can be comprehended is so *very* small! And so the poor teacher, and the poorer parent, and the still poorer pupil, think that a certain study has been finished, merely because a most crude and bare outline has been gone through with.

"Will you have your bread mummed (mumbled), or crumbed?" asked a toothless old lady near the White Mountains of a traveler who had called and requested a bowl of bread-and-milk. The traveler, to whom mumbling was new, chose that; but conceive his horror when she began to chew his bread for him and drop it into the milk! So it seems to me with too much of the mental food of to-day: we try to get it too soft and too easy of mastication, forgetting that God has given *teeth* for their appropriate work. In other words, I believe that, although due explanation should be given of such things as the child can comprehend, it should often be required to study that which it can not as yet understand; and by persistent effort fix in the memory that which future years alone will enable it to see the value and use of, and to *understand* if at all. I am sick of seeing philosophers running round in short jackets and pantalets. It does n't accord with my idea of the fitness of things. I have seen this, that the first and most necessary thing for the child to learn is the due acknowledgment of authority, parental and all. The parent who never requires the child to obey unless he can see the reasonableness of the requirement will soon find himself in the dilemma to which a reverend friend—now, alas, a prisoner in the land of Dixie—found himself reduced. His son Ned was to be reasoned with always; but at last he found that Ned had no idea of obeying unless he was beaten in argument, and that he was pretty skillful in finding reasons to support his side, and so that he did n't mind at all. Now my friend was a man of sense, and when he found he must either give up his pet theory or ruin his boy he chose the former; and thenceforward Ned obeyed because his father told him to, not because he first saw the reasonableness of it. But I am rambling on to a great extent.

Childhood has so often been called the spring-time that the simile has grown rather stale, and yet let us use it once more. It seems to me that we expect our crops too early: like those high northern lati-

itudes where the sowing and the reaping follow one another within two or three weeks, but the crop is hardly worth the harvesting. It is too much like the old farmer's crop of potatoes. Said he "I can always tell to a potato how many I shall raise: I raise just as many as I planted, for my land is n't strong enough to rot 'em." But this trenches a little upon the subject of training the memory, concerning which I shall have a few words to say in a future number.

TEACHER.

"ROCK OF AGES."

THE Right Hon. W. E. Gladstone, Chancellor of the Exchequer, has translated into elegant Latin verse Toplady's beautiful hymn 'Rock of Ages', which was so great a favorite of the late Prince-Consort's. We give both the original and the translation.

ORIGINAL.	TRANSLATION.
Rock of Ages, cleft for me,	Jesus, pro me perforatus,
Let me hide myself in thee!	Condar intra tuum latus!
Let the water and the blood,	Tu per lympham profluentem,
From thy riven side which flowed,	Tu per sanguinem tepentem,
Be of sin the double cure,	In peccata mi redunda,
Cleanse me from its guilt and power.	Tolle culpam, sordes munda.
Not the labor of my hands	Coram te nec justus forem,
Can fulfill thy law's demands:	Quamvis, totâ vi laborem,
Could my zeal no respite know,	Nec si fide nunquam cesso,
Could my tears for ever flow,	Fletu stillans indefesso:
All for sin could not atone!	Tibi soli tantum munus;
Thou must save, and thou alone.	Salva me, Salvator unus.
Nothing in my hand I bring:	Nil in manu mecum fero,
Simply to thy Cross I cling;	Sed me versùs crucem gero;
Naked, come to thee for dress;	Vestimenta nudus oro,
Helpless, look to thee for grace;	Opem debilis imploro,
Foul, I to the fountain fly;	Fontem Christi quæro immundus,
Wash me, Savior, or I die!	Nisi laves, moribundus.
While I draw this fleeting breath,	Dum hos artus vita regit;
When my eyelids close in death,	Quando nox sepulchro tegit:
When I soar to worlds unknown,	Mortuos cum stare jubes,
See thee on thy judgment throne,	Sedens Judex inter nubes;
Rock of Ages, cleft for me,	Jesus, pro me perforatus,
Let me hide myself in thee!	Condar intra tuum latus!

Jour. of Educ., U. C.

IT'S AS TRUE AS YOU LIVE.

"WHAT a dreadful affair!" said a hen, who was walking about on the other side of the village from where the circumstance was supposed to have taken place; "what a dreadful affair took place in our house last night! I shall not be able to sleep any more, I am afraid. But it is a fortunate thing that the most are on my side."

Thereupon she began to state that the feathers of all the other fowls bristled up the night before, and the bravest of their defenders had dropped their combs from fear. "It 's as true as you live."

Now I must begin my story, the facts of which were believed to have occurred on the opposite side of the village. The sun had already been down some time, and all the chickens began to fly up on their roost. One of them was a young hen. She had beautiful white feathers and short legs; she laid eggs as regularly as her sisters, and was as respectable as any individual in the whole hen-house. While sitting quietly, she picked about her wings a little, and one of her beautiful white feathers fell down on the floor.

When she saw it she said "It seems to me that the more I peck myself the more beautiful I grow." She only spoke in sport. She was very handsome, but she never grew proud about it; indeed she seldom thought of it. She was very witty, and only said what she did to make a good hearty laugh all through the house. Then she went to sleep. She slept soundly, because she had been good all day.

It became very dark. One hen sat beside another and slept, and all were asleep, except a certain one whose name I will not here repeat. She had heard, and she had not heard. But she was pretty sure she had heard some one say that if you want to become very pretty you must peck yourself a great deal. So nothing would do but she must tell it to her neighbor.

"Wake up, wake up;" she whispered, "did n't you hear what was said a while ago? I will mention no body's name; but there is a certain proud hen in our house, who says she makes it a habit to peck herself, so that her feathers may fall out and she may become more beautiful all the time. Such a hen ought to be despised by every one in our whole city."

Right over the hens and chickens, and close under the roof, was a pair of old owls, with their young ones. That family were noted for their sharp ears, and they heard some one whispering about a certain young hen. They rolled their great eyes around, and the old mother

owl said to her little children "Did you hear what was said below us a few moments ago?"

"No, mother;" they replied, "we were almost asleep."

"Well, I 'll tell you. A certain hen has pecked out fifty of her white feathers, and says she is going to keep doing it till she has pecked out three hundred. She does it because it makes her prettier. I ca' n't keep such an absurd thing to myself: it ought to be known."

"Take care, children:" said the old owl father, "I think there is some mistake about it."

"I shall tell it to my neighbors, any how." spoke the old mother. And then she flew out. "Dreadful! dreadful!" she cried, as she came up to the front-door of the pigeon-house. "Have you heard the news? Dreadful! We have a hen in our house who has pulled all her feathers out, because she says it makes her handsome. She will freeze to death, if she 's not dead already. Dreadful! It 's as true as you live."

"Where? where?" cried a few of the pigeons.

"In our house: I have as good as seen the affair myself. One can scarcely believe the thing, it is so ridiculous. But you may depend upon it. It 's as true as you live."

Then the pigeons who heard the news went to every room in their house, and, after waking up all the sleepers, said "What awful news we have just heard! There are two hens in this city who have plucked out all their feathers because it makes them beautiful. But they have since been frozen to death. Served them right. There 's no doubt of the matter. It 's as true as you live."

Off flew an old pigeon to a crow with whom she was acquainted. "Wake up! wake up! I have some wonderful news to tell you. In our city there are three hens that have plucked all their feathers out to make them pretty! But they are now dead and buried. One ought not to keep such bad news to himself. Go and tell it to your neighbors. They would be glad to hear about it."

So the crow told it to the bat, and the bat to the hawk, and it passed from one to another, until it finally came back again to the hen-house from which it had started.

The blackbird flew into the hen-house door, and said "What dreadful news is circulating all over the country! Five hens have plucked out all their feathers, because they thought it made them beautiful. But an assassin came upon them and killed them all just afterward; and their bodies have been stolen away, so that no one can tell what has become of them."

The little white hen, who had accidentally plucked out a single

feather, could not at first recognize this news as having come from her remark; but, as she was of a shrewd turn of mind, the whole thing finally flashed upon her.

"Now," said she, "I 'll tell my friends here what I am going to do. I shall narrate this wonderful thing, and tell the name of each tell-tale who has been so busy and made such a mountain out of a mole-hill. At the conclusion of my account I am going to say that it all came from my having lost a single feather. This shall be published in all our papers, and the name of every tell-tale shall be printed in large capital letters: it 's as true as you live!"

The next day every body read the account of the little white hen; and the names of the tell-tales were never forgotten in that country.

Selected.

NORMAL UNIVERSITY.

MONDAY, Tuesday, Wednesday, Thursday and Friday, June 23d to 27th inclusive, were busy days at Bloomington. The Examination of the classes in the Normal Department began on Monday morning and continued four entire days. Every class was examined, and the test was more severe than any to which the school has before been subjected. In most cases the topics for recitation were written out, and distributed to members of the several classes by lot, care being taken that no more than three or four topics should be given in advance of the recitation. Nearly every performance was attended to, and marked, either by some member of the Board of Education or other visitor. We believe the result of this thorough test was entirely satisfactory, to the Board, visitors, teachers, and pupils. Not that every answer was perfect: such a result could not be attained without that special, objectionable preparation which would render any examination worthless. But diligence and well-directed, skillful effort on the part both of teachers and pupils were sufficiently shown.

The recitations demonstrated that a thorough acquaintance had been made with principles rather than rules; that the *elements* of each study had received the chief attention, and that the students had been trained to state promptly what they knew, in correct, vigorous English. The chief interest of the whole examination seemed to centre in the class in the Theory and Art of Teaching. This class contained about half the members of the school, and had been under the training of Mr.

Edwards. Their examination occupied the entire afternoon of Thursday; and the large audience, who had come through pouring rain and almost impassable mud, seemed to think themselves fully repaid for their trouble. The examination had reference to the practical things of the teacher's business chiefly, such as organization of schools, programme of studies, religious exercises, moral instruction, hearing recitations, school discipline, etc. It was apparent that the views and opinions of the pupils, however they might have been enlarged or shaped by the teacher, were still their own; and that they were not simply repeating either borrowed language or borrowed thought.

The examinations of the Model School were confined to Tuesday and Wednesday, most of the former day being occupied in hearing classes that had been taught by Normal students. Of course, these classes exhibited various degrees of proficiency and skill on the part of their pupil-teachers; but for the most part their performances were strong testimony in favor of the plan of observation and practice in the Model School, which now forms a prominent feature of the professional training in the institution. Those pupil-teachers can hardly be aware of the benefit such practice will be to themselves. Wednesday was given to the examination of classes that had been in charge of the regular teachers, Mr. Childs and Miss Ketcham. We have not room to particularize, but the satisfaction of the spectators could be read on their faces the moment a visitor entered the room. The attention of the little ones in the Primary room, the novel and constantly-varying methods of teaching, and the life and precision with which every thing was done, elicited unmixed commendation; and it was voted on all hands that here was a teacher who understood that most difficult of all pedagogic arts, how to teach a primary school. The exercises in the High-School room were marked by excellent order, attention, accuracy and thoroughness in recitation, accompanied by a promptness, life and *snap* that was refreshing. At the close of the exercises Mr. Superintendent Wells, of Chicago, remarked that he had studied with much care the Model Schools connected with all the Normal Schools in the country, but that his observation for the last two days obliged him to declare with all honesty that he believed we had "the best model school on the continent" here in Bloomington.

On Thursday evening Mr. Edwards, Principal-elect, gave the Annual Address before the Literary Societies. The audience was large, although the evening was far from favorable; and the close attention and frequent applause showed how the performance was regarded. The speaker's theme was 'The Heritage of Culture'. The address will be published.

Friday was Commencement-day; and, as the sun vouchsafed to show his face early in the morning, the large hall of the University was filled before ten o'clock, the hour for the exercises to begin. The following programme of exercises was then performed, to the evident satisfaction of all.

Prayer, ... Rev. J. W. C. Coe.
Chant.
Possession of Irresponsible Powers not favorable to Excellence of Character, Sarah Eliza Beers, Champaign County.
Obedience to Law, ... James Frederic Ridlon, Warren County.
Music.
The Power of Verse to Perpetuate, . . Helen Frances Grennell, McLean Co.
Influence of Greece upon Human Culture, . . Lorenzo Dow Bovee, Will Co.
Music.
Shakspeare as a Teacher of History, ... Emma M. Trimble, Tazewell Co.
"Stick to your Aim," Esther Maria Sprague, Will Co.
Music.
The Power of Example, ... Logan Holt Roots, Perry Co.
Valedictory, ... Elizabeth Carleton, Pike Co.
Class Song (selected).
Awarding Diplomas.
Prayer, ... Rev. L. H. Pitner.

The exercises were closed on Friday evening by a *levee* given at the University Hall, by the Graduating Class. A large number of visitors, citizens, students and their friends passed a very agreeable evening, entertained by tableaux, music, and conversation. Presents were made to Mr. Bass, Miss Peterson, and Mr. Messer, who retire from the Board of Instruction; and the accompanying speeches and responses closed the evening.

At the meeting of the Board of Education eleven of the fifteen members were present. The following communication from Col. Hovey was presented.

"Headquarters 2d Brigade, 1st Division, Army of the Southwest,
Camp near Batesville, Arkansas, June 16, 1862.

"President Moulton — *Dear Sir:* It will be entirely impossible, with my plans for the future, for me to again resume duties in the Normal University; and I beg you to tender to the Board over which you preside my grateful acknowledgments for the thousand kindnesses which they extended to the first Principal of the University.

"I am very truly your obedient servant, C. E. HOVEY."

Col. Hovey's resignation was received and filed; and the Board passed the following resolution:

"*Resolved*, On behalf of the friends of education, and as the cheerful tribute of this Board, that we tender our thanks to Professor Hovey, late Principal of the Normal University, for his efficient services in building up said institution, and his attention to the varied and important business connected therewith."

The Board then unanimously elected Richard Edwards, late of the St. Louis Normal School, but for the past term teacher in the University, as permanent Principal. Mr. Perkins Bass, of Chicago, a member of the Board, has discharged the duties of Principal for the past year with great fidelity and success; but, being unwilling to be absent longer from his profession, he declined to remain in the position, although urged to do so by his fellow members of the Board.

Thus closed the Anniversaries of the Normal University; and we are sure that its friends, of whom a large number were present, went away with light hearts and high hopes for the future of the institution. Reporters were present nearly the entire week, and furnished full accounts for the Chicago *Times*, *Post*, and *Tribune*, and for the Bloomington *Pantagraph*.

The next term will begin on Monday, September 8th, with the following *permanent* Board of Instruction: Richard Edwards, *Principal;* Edwin C. Hewett, Joseph A. Sewall, Leander H. Potter, Thomas Metcalf (Mr. Edwards's successor as Principal of the St. Louis High School), and Margaret F. Osband, *Assistants*. Charles F. Childs and Livonia E. Ketcham will remain as teachers of the Model School.

OBJECT TEACHING:

ITS PRINCIPLES NOT GENERALLY UNDERSTOOD.

THE teacher who enters upon the system of *Object* teaching with only some general idea of its principles, and with only *such* 'objects' and other aids in the way of illustration as he may conveniently gather together in his own neighborhood, will be quite apt to present only the most meagre outline of the subject, and, even in that, to run into mere miscellaneous 'Lessons on Common Things'. Lessons on 'Objects', for the purpose of mental development, and 'Lessons on Common Things', for imparting information, are quite different in character and purpose; and although the two may often be advantageously combined, it is very desirable that the teacher should understand the

difference between them, as important principles in teaching, as well as in mental philosophy, are involved in the distinction. But as a practical 'object' lesson, drawn out in the simple form in which it is presented to a juvenile class, will develop the principle better than the most elaborate essay, we refer the inquirer to the manuals on this subject which he may now obtain; and we assure him that, in this era of educational progress, his *professional* education — that knowledge which he needs to enable him to instruct even the lowest class in the common school — will soon be deemed deficient, if he does not thoroughly understand the principles and practice of true object-teaching.

It is true that these principles, founded on practical *observation* of *things*, although well known and almost universally adopted in all the higher departments of science, and in scientific *discoveries* especially — in vegetable and animal physiology, chemistry, geology, etc. — have not yet been fully reduced to practice in the details of primary education. Yet the principles themselves are not new: they are as old as the days of Aristotle: they are exemplified in the history of a Harvey, a Newton, a Linnæus, and a Hugh Miller, and of all devoted students of Nature. All true science has been built up by following out the principles of this object system. Our present knowledge of the vegetable kingdom, for example, has been gathered from a close observation of the *objects* themselves. Trees, shrubs, herbs, and grasses, were first noticed in their *general* features, before the minor subdivisions were made; after which classes, orders, families, and species, began to be distinguished. The forms, seemingly innumerable, which leaves present were, after a while, carefully noted by patient observers, and grouped into a few classes, and names assigned them: the same of the stems, roots, and flowers; until, at length, all the varieties in structure, and all the varied properties of plants, became known, and formed the so-called science of Vegetable Life. The same course which the race pursued in building up a science — the observation of things, and facts, and their relations, first as to *the whole*, and then as to *the parts* — we would now have children pursue, from infancy upward, in a course of object-lesson instruction: we would have them observe, and compare, and contrast, and weigh, and measure; and thus, *of themselves*, acquire a knowledge of facts and principles; for such is the way to lay the only sure foundations of true knowledge; and such is the way to secure true mental discipline also.

But much is yet to be done before the 'object' system of teaching, as it has been called, shall be generally understood, and fully adapted to the wants of our schools; for while the principles are plain enough to those who will take Nature for their guide, and follow out the meth-

ods which children pursue in their earliest efforts after knowledge, we are still hedged about by arbitrary modes, and it is difficult to break through the prejudices which our own education has fostered. We have long been accustomed, in our system of elementary training, to reduce every thing to a 'science', and begin our teachings with so-called *elementary* principles, which by many are erroneously supposed to be the *first* things that a child understands; whereas these elementary principles are usually the *final results* obtained from many facts and much reasoning. Thus in geometry, its elementary principles are said to stand in the order of points, lines, figures, surfaces, and solids; but who does not know that a child gains ideas of the *solid* first, and proceeds thence through surfaces, figures, and lines, to points? The merest child has obtained, from Nature, a very considerable knowledge of solids long before it has any other idea of a *point* than of a *material* one. In the course of Nature, it proceeds from the concrete to the abstract, from the whole to the parts which compose it. Our teachers often mistake the natural order of teaching a subject, by supposing that they are to *begin* with what science has *deduced* as its elementary principles. This error has, unfortunately, crept into the subject of object-teaching, and led astray some who are its professed expounders. Thus we find that some teachers think the natural order of teaching the alphabet is to begin with teaching the primary forms, such as curved lines and straight lines, that enter into the formation of the letters, *because* such forms are the elements or first principles that make up the letters. But these *lines* are not the first things that the child takes notice of when he looks at a letter: he observes the letter *as a whole*, and thus recognizes it long before he notices the several forms of the lines that compose it; just as he observes the general form of an animal, and thus distinguishes and names it, long before he can name or describe its parts. Some teachers, who think they are proceeding upon the object-system, have an idea that the proper way to teach *reading* is to begin with the *elementary sounds of the letters*, because these sounds are the *elements* that are combined into spoken language. But Nature does not teach children the elementary sounds before words; and there are thousands and tens of thousands of persons who use words very well, and pronounce them with the standard accuracy of good usage, who have never investigated these elementary sounds at all. We doubt if one out of a hundred of our best speakers can tell what they are. These *elements* are the results of investigation by scholars, who do not even agree as to their character or number. Is it in the order of *Nature*, then, to teach them to children *before* they are allowed to enter upon the art of reading? The ele-

mentary sounds of the letters—'exploding the vowels', etc.—furnish good physiological and rhetorical exercises: they give flexibility to the organs of speech; they are useful for training the ear; they promote accuracy of enunciation; but all this naturally comes in *after* the first steps in reading, just as rhetoric does, both of which are allied departments of the fine arts. But Nature teaches first useful arts, on which alone the fine arts can be grafted. To suppose it necessary, or desirable, that the child should be taught to read words as the representatives of objects by first learning what are to him meaningless elementary sounds, is just about as reasonable as to suppose that he can not move his arm with propriety until he has learned the particular uses of every muscle required in its movements. If necessary to begin with the elementary sounds before reading, why is it not just as important to begin with them before allowing the child to *speak* words? Probably because Nature has here got the start of the teacher.

Those who would apply the true principles of object-teaching to the details of primary education must guard against the fallacy that knowledge, or science, has been built up, in the progress of the race, by beginning with the observation of elementary principles, and that we are to begin our teaching with calling attention to these *elements* of things. In reality, these *elements* are the *last* attainments of science; and although we may some times explain a subject to a scholar by inverting the order, it is a very difficult course for children. We should begin to teach the child just where Nature is giving *her* lessons; and the best way to learn the application of the principles of object-teaching to any particular subject is to ask how children intuitively acquire knowledge of the same subject—whether they begin with the concrete or the abstract, the whole or its parts; and if nature teaches them to recognize the *elementary principles* of things before she presents to them the *things themselves*. If teachers will examine the subject of object-teaching in this light, and test the theories presented in its name by the method of Nature, the system will soon become one of definite and well-recognized principles, and will, we have no doubt whatever, become universally approved and practiced in all the details of primary education. Educational Bulletin.

I HAVE no conception of any manner in which the popular republican institutions under which we live could possibly be preserved, if early education were not freely furnished to all by public law, in such forms that all shall gladly avail themselves of it. WEBSTER.

WHAT A TEACHER SHOULD BE.

A POLISHED man; so affable and mild,
His very grace should awe the rude and wild;
His smile win love, his slightest frown bring tears,
His gentleness dispel the coward's fears;
His just discernment make no partial choice:
'T is plainest bird that pipes with sweetest voice.

A LEARNED man; with skill to grasp the lore
Once but the sages' hieroglyphic store;
To strip the glorious stars of myths and signs,
And teach how God's great wisdom through them shines;
To pluck the flowers, and show his skill who made
The modest violet and the velvet blade;
To smite the rock, and by its sparkling grains
Unfold its nature — born of seas and plains;
To range the universe with varied skill,
And mould rich thoughts to beauty at his will.

A SOCIAL man; not he whose stately walk
Keeps pompous time to high resounding talk,
Gains the sweet homage of the unfolding mind —
A trust more sacred than the wealth of Ind,—
But that rare teacher who the lowliest makes
A sharer in his joys, and warmly takes
The little poor boy's hand with zest as great
As though his father steered the 'ship of state'.

A CHRISTIAN man; all princely virtues meet
In one who sitteth at the Savior's feet;
Though honors crown, though wealth encompass him,
Their splendor in religion's light grows dim.
Wealth without Christ is but a scorpion-rod,
There is no honor like the love of God.

SO SHOULD HE TEACH; in every lesson find
Some precious grains for the immortal mind,
And lead his charge not only up the hight
Of great Parnassus, with its founts of light,
But to high Heaven, where he one day may stand,
A godlike teacher, with a godlike band.

Educator.

I HAVE lived to know the great secret of human happiness is this: Never suffer your energies to stagnate. The old adage of 'too many irons in the fire' conveys an abominable lie. You can not have too many — pokers, tongs and all. Keep them all going.

DR. CLARKE.

STRICTURES ON MR. WESTMAN.

EDITOR OF THE TEACHER: I have occasionally noticed some mistakes in the *Teacher*, but have not thought it best to correct them, for this reason: the pages of the *Teacher* ought to be filled with methods of teaching, methods of study, and modes of examination, rather than the discussion of less important subjects; and I now ask the privilege of presenting some views on the above subjects at some future time.

I will, however, on this occasion, correct what seem to me to be some very bad mistakes. In the last number of the *Teacher* I notice some remarks on the words *worth, near, like,* etc. In the first place, let me say that before arriving at conclusions it is generally best to take some well-known principle as a guide. The principle applicable in this case is this: the office of a word determines its part of speech. Grammarians classify words according to their general use; but it by no means follows that these words are always to be parsed according to their classification.

In the remarks referred to this expression is used: "But wisdom is worth them all"; and *them* is said to be objective, which is a mistake. *Worth* is an adjective, and modifies wisdom; *them* modifies all; *all* modifies worth.

Again: this sentence is used: "It is richly worth a year's labor"; and another is said to match it: "The star is exactly over our heads". The difference is this: *richly* is an adverb, and modifies *worth; worth* is an adjective, and modifies *it,* and *labor* modifies *worth: exactly* is an adverb, and modifies the adverbial phrase 'over our heads', and not the preposition *over.* A few sentences will illustrate: My hat is worth five dollars. (Worth, an adjective, modified by dollars.) The near horse. (Near, an adjective.) I live near the city. (Near, a preposition.)

Nouns frequently modify verbs, adjectives, and adverbs; and in such cases they are generally used in the place of adverbial phrases, and to that extent they are *adverbs.* Let me repeat the principle: *the office of a word determines its part of speech;* and it will not do to discard the regimen of grammar for the purpose of conforming to arbitrary rules.

Again: Pronouns are used as subjects or objects, frequently, without any regard to their forms; and if sentences are correct it is not necessary to supply the ellipsis. For instance: "A better would you

fix?" *A* is an adjective, and modifies *better; better* is an adjective-pronoun, and the object of *would fix;* and it matters not what word is left out, *better* is used in place of it, and is therefore an adjective-pronoun. J. P. WOOD.

WASHINGTON, ILLINOIS.

"SKEDADDLE."—This word has been supposed to have originated in the fertile brain of some Yankee, who was at a loss for an appropriate term to express his idea of the mania of the rebels for retreating before the advance of our armies. The *Louisville Journal*, however, shows that the word is of Grecian birth, as will be seen by the following extract from an article in that paper:

"The primitive of skedaddle is a pure Greek word of great antiquity. It occurs in Homer, Hesiod, Æschylus, Sophocles, Herodotus, Thucydides, and Xenophon, and it was used to express in Greek the very idea that we undertake, in using it, to express in English. Homer, in the Iliad, uses only the aorist. ἐσκέδασα or σκέδασα. Thus in Iliad xix, 171. we have σκεδασῶν λάων for scattering, dispersing. In Prometheus, Æschylus thus uses it (σκέδα) in making the 'sun disperse the hoar frost of the morn'. And again Prometheus uses this word in predicting woes upon Jupiter, when he says that 'a flame more potent than the lightning shall be invented. which shall (σκέδα) *shiver* the ocean-trident, the spear of Neptune.' In the Odyssey we find Homer using σκεδάσις in describing the *scattering* of the suitors of Penelope when Ulysses should come; and in the twentieth book of the Odyssey we have the same word used for the *dispersing* of the suitors to their houses as the result of the return of Ulysses.

"In Thucydides, Book iv, 56, we have an account of a garrison at Cotyora and Aphrodisia, which terrified by an attack a (ἐσκεδασμένον) *scattered* crowd. At the capture of Torone, in Chalcidica, Thucydides describes the results of the rush of Brasidas and his troops toward the highest parts of the town. and among these results 'the rest of the multitude (ἐσκεδάννυντο) scattered or dispersed in all directions alike'. In this sense σκεδάσις is used by Xenophon in the Anabasis, by Plato in the Timæus, by Apollonius of Rhodes, by Hesiod. and by Sophocles. It is, therefore, a classic word, and is full of expression."

JUDAS betrayed our Lord for thirty pieces of silver. Many professing Christians have for a similar service made ten times the money.

SCHOOL EXERCISES.

QUESTIONS SUBMITTED TO THE CANDIDATES FOR ADMISSION TO THE PROVIDENCE HIGH SCHOOL, APRIL, 1862.

GRAMMAR.—1. Write the plural of *cargo, folio, palmetto,* and the letters *a* and *b*

2. Write the possessive plural of *showman, Mussulman,* and *child.*

3. Give the principal parts of the following words: *cite, break, chide, clothe, drink, lie* (to recline), *lay, sit.*

4. Analyze the following sentences, and parse the words italics: I am resolved *what* to do. All *mine* is *thine.*

5. I did not know of *his* being a *traitor.* For an idler to be a good scholar *is* impossible.

6. Call imperfection *what* thou fanciest such.

7. Be so kind as to *oblige* me. My friend has gone *home.* He has studied well until *now.*

8. Correct the errors and parse the words in italics in the following sentences: Every boy and every girl *were* studying. I intended to have *come.* Who did you see.

9. The horse and chaise *are* in *their* place.

10. It may have been *her.* I never thought of its being *him.*

GEOGRAPHY.—1. Give the boundaries of Georgia, Louisiana, and South Carolina, and the capital of each.

2. Name ten of the largest cities in the Southern and Middle States, and describe their location.

2. Through what bodies of water must one pass in going in a steamer from Cincinnati to St. Petersburg?

4. Name the political divisions of Europe, and give the capital of each.

5. Give the latitude and longitude of Providence, New York, Washington, New Orleans, Havana, Paris, London, Rome, St. Petersburg, Vienna, and Constantinople.

6. Name the principal lakes, rivers and mountains in Africa, and describe the rivers.

7. Describe six of the largest rivers in South America.

8. Name the bays, rivers and mountains in Africa.

9. Name the principal ranges of mountains in Europe.

10. Name the principal places where wheat, cotton, sugar and rice are produced.

HISTORY.—1. Give an account of the settlement of Maryland.

2. Give an account of the settlement of Pennsylvania.

3. Name the principal events of 1775, and give an account of the battle of Bunker Hill.

4. Describe the Stamp Act.

5. Name the principal events of 1776, and describe the battle of White Plains.

6. Give the principal events of 1777, and give an account of the surrender of Burgoyne.

7. Describe the battle of Monmouth, and the massacre of Wyoming.

8. Give an account of the treachery of Arnold and the death of Andre.

9. Name the principal events of 1781, and give an account of the siege of Yorktown and the surrender of Cornwallis.

10. Give an account of the life of General Greene.

MENTAL ARITHMETIC.—1. A watch and chain cost $200. The watch cost $20 more than twice the cost of the chain. What was the cost of each?

2. A boy, being asked the time of day, answered that $\frac{1}{3}$ of $\frac{2}{5}$ of the time past noon was equal to $\frac{1}{4}$ of $\frac{3}{5}$ of the time to midnight. Required the time.

3. A piece of cloth before being sponged was $\frac{4}{5}$ of a yard wide, and after being sponged was but $\frac{3}{4}$ of a yard wide. What per cent. did it lose in shrinking?

4. A, B and C can do $\frac{1}{3}$ of a job of work in 4 days; A and B can do $\frac{1}{8}$ of it in 5 days; A and C can do $\frac{1}{5}$ of it in 6 days. In how many days would each do it?

5. If a merchant sells flour at $6 a barrel and gains 20 per cent., how must he sell it a barrel to lose 25 per cent.?

6. A spent $\frac{1}{5}$ of his money and $\frac{1}{4}$ of the remainder, and then gave $10 more than $\frac{1}{3}$ of what he had at first, when he found he had but $30. How much had he at first?

7. The head of a fish is $\frac{1}{7}$ of its entire length, its body is $\frac{2}{3}$ of its entire length, and its tail is 4 inches longer than its head. What is the length of the fish?

8. If from three times a certain number we subtract $\frac{2}{3}$ of the number, $\frac{5}{6}$ of the number, and 25, the remainder will be 10 less than the first number. What is the number?

9. A boy has a certain number of pencils: if he should sell them at the rate of $\frac{3}{4}$ of a cent apiece he would lose 6 cents, but if he should sell them at $\frac{5}{6}$ of a cent apiece he would gain 6 cents. How many pencils has he?

10. A boy bought an apple, an orange, and a peach, for 12 cents. The orange cost three times the difference in price of the apple and the peach, and the apple cost $\frac{1}{5}$ of the sum of the price of the peach and of the orange. What was the cost of each?

N.B. State the reasoning process clearly, in as few words as possible.

WRITTEN ARITHMETIC.—1. Divide $\frac{4\frac{1}{2}}{36}$ of $\frac{34}{.07}$ by $\frac{.001}{34\frac{2}{3}}$ of $\frac{24}{.04\frac{2}{7}}$

2. During a shower $2\frac{1}{4}$ inches of rain fell. How many hogsheads (63 gallons each) fell on $\frac{1}{2}$ an acre of level surface?

3. Twenty per cent. of $\frac{3}{5}$ of a certain number is what per cent. of $\frac{3}{4}$ of the same number?

4. I bought a horse for $200. What shall I ask for him that I may take 15 per cent. less than I ask and yet make 20 per cent.?

5. A merchant paid $2500 for cotton and sold it without delay at 10 per cent. advance. He invested the proceeds in prints, which he sold at a loss of 10 per cent. Did he gain, or lose, by the transaction, and how much?

6. A capitalist sent a broker $5000 to invest in cotton after deducting his commission of $\frac{3}{4}$ per cent. How many pounds of cotton could he buy at 20 cents a pound.

7. A merchant sold $\frac{1}{4}$ of his goods at an advance of $12\frac{1}{2}$ per cent.; $\frac{1}{5}$ at an advance of 8 per cent.; and $\frac{1}{10}$ at a loss of 15 per cent. At what per cent of the cost must the remainder be sold in order to gain 10 per cent. on the whole?

8. A grocer bought a hhd. of molasses containing 140 galls. for $36, but a part of it having leaked out, he sold the remainder for $33\frac{1}{3}$ cents a gallon, and lost 5 per cent. How many gallons leaked out?

9. A's money is to B's as 3 to 5; but after A had spent $49, and B $95, A's money is to B's as 5 to 7. What had each at first?

10. Required to lay out a garden in the form of a rectangle which shall contain $1\frac{7}{8}$ acres, so that its breadth shall be to its length as 3 to 4. What must be its length and breadth, and the diagonal distance between its opposite corners?

IN proportion as man's intelligence increases is his labor more valuable. A small compensation is the reward of mere physical power, while skill, combined with a moderate amount of strength, commands high wages. The labor of an ignorant man is scarcely more valuable than the same amount of brute force; but the services of an intelligent, skillful person are a hundred-fold more productive. Prof. MAYHEW.

COST OF WAR AND EDUCATION COMPARED.

THERE is not an appetite that allies man to the brutes, nor a passion for vain display which makes him more contemptible than any part of the irrational creation, which does not cost the country more every year than such a system of schools as would, according to the evidence I have exhibited, redeem it almost entirely from its follies and its guilt. Consider a single factitious habit of our people, which no one will pretend adds any degree to the health, or length to the life, or decency to the manners, of the nation — I mean the smoking of tobacco. It is said, on good authority, that the *annual* expenditure in the country for the support of this habit is ten millions of dollars; and if we reflect that this sum, averaged upon all the people, would be less than half-a-dollar apiece, the estimate seems by no means extravagant. Yet this is far more than is paid to the teachers of all the public schools in the whole United States.

Were nations to embark in the cause of education for the redemption of mankind, as they have in that of war for their destruction, the darkest chapters in the history of earthly calamities would soon be brought to a close. But where units have been grudged for education, millions have been lavished for war. While for the one purpose mankind have refused to part with the superfluities, for the other they have not only impoverished themselves but levied burdensome taxes upon posterity. The vast national debts of Europe originated in war; and but for that scourge of mankind they never would have existed. The amount of money now owed by different European nations is said, on good authority, to be $6,387,000,000. Of this inconceivable sum the share of Great Britain is about $4,000,000,000 (in round numbers, four hundred millions of pounds sterling); of France, $780,000,000; of Russia and Austria, $300,000,000 each; of Prussia, $100,000,000; and the debts of the minor powers increase this sum to six billions three hundred and eighty-seven millions of dollars. The national debt of Great Britain now amounts to more than $140 for every man, woman and child in the three kingdoms. Allowing six persons to each family, it will average more than eight hundred and fifty dollars to every household — a sum which would be deemed by thousands and tens of thousands of families in that country to be a handsome competence, nay, wealth itself, if it were owing *to* in stead of *from* them.

It is estimated that during the twenty-two years preceding the general peace of 1815 the unimaginable sum of £6,250,000,000, or thirty

billions of dollars, had been expended in war by nations calling themselves *Christian*—an amount of wealth many fold greater than has ever been expended for the same purpose by all the nations on the globe whom we call *savage*, since the commencement of the Christian era. The earth itself could not be pawned for so vast a sum as this, were there any pawn-broker's office which would accept such a pledge. Were it to be set up at auction, in the presence of fierce competitors for the purchase, it would not sell for enough to pay its war-bills for a single century. The war-estimates of the British government, even for the current year of peace, are eighty-five millions of dollars; and the annual interest on the national debt incurred by war is at least a hundred and twenty millions more; or more than two hundred millions of dollars, for a common and, on the whole, a very favorable year. Well might Christ, in the Beatitudes, pronounce his emphatic benediction upon the 'peace-makers'.

We have emulated, in this country, the same gigantic scale of expenditure for the same purpose. Since the organization of the federal government, 1789, the expense of our military and naval establishments and equipments, in round numbers, is seven hundred millions of dollars. Two of our ships-of-the-line have cost more than two millions of dollars. The value of the arms accumulated, at one time, at the arsenal at Springfield, in this state, was two millions of dollars. The Military Academy at West Point has cost more than four millions of dollars. In our town meetings, and in our school-district meetings, wealthy and substantial men oppose the grant of $15 for a school-library, and of $30 for both library and apparatus; while at West Point they spend fifty dollars in a single lesson at target-firing, and the government keeps a hundred horses, and grooms and blacksmiths to take care of them, as an indispensable part of the *apparatus* of the academy. The pupils at our Normal Schools, who are preparing to become teachers, must maintain themselves; the cadets of the academy receive $28 a month, during the entire term, as a compensation for being educated at the public expense. Adding bounties and pensions to wages and rations, I suppose the cost of a common foot-soldier in the army can not be less than $250 a year. The average cost of female teachers for the public schools of Massachusetts last year was only $13.60 a month, inclusive of board, or at a rate which would give $163.20 a year; but the average length of the schools was but eight months, so that the cost of *two* common soldiers is nearly that of *five* female teachers. The annual salary of a colonel of dragoons in the United States army is $2,206; of a brigadier-general, $2,958; of a major-general, $4,512: that of a captain of a ship-of-the-line, when in serv-

ice, $4,500, and even when off duty it is $2,500. There are but seven towns in Massachusetts where any teacher of a public school receives so high a salary as $1,000; and in four of these towns one teacher only receives this sum.

Had my purpose been simply to show the pecuniary ability of the people at large to give the most generous compensation to such a company of accomplished, high-minded, noble teachers as would lift the race, at once, out of the pit of vice and ignorance and superstition, as safely and as tenderly as a mother bears her infant in her arms, had my purpose been merely to show this pecuniary ability, then I have already said too much. But my design was not merely to carry conviction to the minds of those who would contest this fact, but to make the denial of it ridiculous.

HORACE MANN'S Eleventh Annual Report as Sec. of the Mass. Bd. of Educ.

SOMETHING ABOUT SCHOOLS.—We know a man who last summer hired four colts pastured on a farm some five miles distant. At least once in two weeks he got into a wagon, and drove over to see how his juvenile horses fared. He made minute inquiries of the keeper as to their health, their daily watering, etc.; he himself examined the condition of the pasture; and when the dry season came on he made special arrangements to have a daily allowance of meal, and he was careful to know that this was regularly supplied.

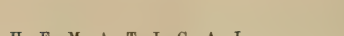
This man had four children attending a district school kept in a small building erected at the cross-roads. Around this building on three sides is a space of land six feet wide; the fourth side is on a line with the street. There is not an out-house or shade-tree in sight of the building. Of the interior of the school-house we need not speak. The single room is like too many others, with all its apparatus arranged upon the most approved plan for producing curved spines, compressed lungs, ill health, etc.

We wish to state one fact only. This owner of those colts, and the father of those children, has never been into that school-house to inquire after the comfort, health, or mental food daily dealt out to his offspring. The latter part of the summer we chanced to ask Who teaches your school? His reply was that he did not know; he believed her name was Parker, *but he had no time to look after school-matters.*

Am. Agriculturist.

MATHEMATICAL.

SOLUTIONS—IV.



Suppose the travelers are journeying in the direction AE. Let B be the place (50 miles from Boston) where the first traveler overtook the geese, and A the place where the second traveler was at that time; C the place (45 miles from Boston) where the second overtook the geese; E where the first and D where the second met the coach. Let y be the rate of travel per hour.

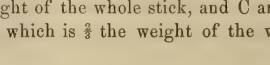
Since the distance BC=5 miles, it took the geese $\frac{5}{3}$ of $2=\frac{10}{3}$ hours to travel it, during which time B had gone over the space AC=$\frac{10y}{3}$ miles; whence AB, the constant distance between the travelers, = $\frac{10y}{3}-5=\frac{10y-15}{3}$ miles.

Since BE=$2y$ and B is 50 miles from Boston, E must be $50-2y$ and D $\frac{2y}{3}+31$ miles; whence DE=$\frac{8y-57}{3}$ miles from it, and $\frac{4}{9}$ of this, or $\frac{32y-228}{27}$, is the time which it takes the coach to go from E to D, in which time the first traveler will have gone $\frac{32y^2-228y}{27}$ miles. This added to DE gives the distance between A and B = $\frac{32y^2-156y-513}{27}$. Consequently, $\frac{32y^2-156y-513}{27}=\frac{10y-15}{3}$.

Clearing, uniting, and reducing, $y^2-\frac{123y}{16}=\frac{378}{32}$; whence $y=\pm\frac{165}{32}+\frac{123}{32}=9$ or $-2\frac{1}{6}$ miles. The distance between them being $\frac{10y}{3}-5$ and the rate of travel 9 miles an hour, B is then 25 miles from Boston when A arrives there.

J. W. O.

IX. Let AB represent the length of the stick, which is 24 feet, and place



C and D with their imponderable bar $\frac{1}{4}$ the distance from A to B, or 6 feet; then AH will balance HE; the centre of gravity of EB is at F, which is twice as far from H as from B; therefore the man at B will carry $\frac{2}{3}$ of EB, or $\frac{1}{3}$ the weight of the whole stick, and C and D will carry AH+HE+$\frac{1}{3}$ of EB, which is $\frac{2}{3}$ the weight of the whole stick. *Ans.* 6 feet from A.

The *New-York Teacher* gives the following rule for all such problems: "Subtract 2 from the number of men for a numerator; subtract 1 from the number of men and double the remainder for the denominator; the resulting fraction represents the distance of the greater number of men from the end of the stick." Thus if there were 5 men, 4 at the lever, $\frac{5-2}{(5-1)\times 2}=\frac{3}{8}$.

J. W. O.

XII. Interest of \$600 due now = 0

600 due in 6 months = 3600 in 1 month
600 " " 12 " = 7200 " 1 "
600 " " 18 " = 10800 " 1 "
600 " " 24 " = 14400 " 1 "
600 " " 30 " = 18000 " 1 "

3600 = 54000 " 1 "

The interest of \$54000 for 1 month is equivalent to the interest of \$3600 for as many months as 3600 is contained times in $54000=15$ months, *Ans.* E. E.

XIII. Let ABC represent the arc and O the centre of the circle. Draw OB, bisecting the chord AC in E, and OD, bisecting the chord AB in D. Then the right-angled triangles ODB and AEB are similar, being measured by half the arc BC. We have, then, OB : BD :: AB : EB, or, R : $\frac{1}{2}$AB :: AB : BE; whence, $R=\frac{\overline{AB}^2}{2BE}=\frac{\overline{AE}^2+\overline{BE}^2}{2BE}$ or, $R=\frac{1^2+\frac{1}{4}^2}{\frac{1}{2}}=450.125$ inches, and the diameter equals 900.25 in., $=75.02083$ feet. B.

XIV. [A solution of this problem, sent us by the Mathematical Editor, we are obliged to defer until next month, being unable to procure the necessary diagram in time for this number.—PUBLISHER.]

XV. The first received .15, leaving .85. The second received $\frac{1}{10}$ of .85 or .085$+\frac{1}{10}$A., leaving .765$-\frac{1}{10}$A. The third received .25 of this or .19125$-\frac{1}{40}$A.; and by the conditions of the question .15$+$.085$+\frac{1}{10}+$.19125$-\frac{1}{40}=$.42625$+\frac{3}{40}$A. $=$.145A. .42625$=144\frac{3}{40}\frac{7}{0}$, and $144\frac{3}{40}\frac{7}{0}\div$.42625$=340=$the number of acres in the farm; from which we easily find the shares to be 51, 29, 65, and $48\frac{3}{4}$ acres. F.

XVI. Let x represent the number of acres. The first lot will contain $\frac{x+1}{10}$A., leaving a remainder of $\frac{9x-1}{10}$; the second, .12 of this, or $\frac{27x-3}{250}$, with $\frac{198x-22}{250}$ remaining; the third, .15 of this $+\frac{1}{2}$A., or $\frac{594x+2434}{5000}$, with a remainder of $\frac{3366x-2874}{5000}$; the fourth, .20 of

this $+\frac{3}{5}$A., $=\frac{3366x+7126}{25000}$; and by the conditions of the question the sum of these several amounts must equal 65 acres.

Clearing of fractions and transposing, we have $11536x=1603504$ or $x=139$ acres; from which we find there were 14, 15, 17, 19 and 74 acres in the several fields. G. B. E.

XVII. The building moved a distance equal to the circumference of the roller at every turn. 8 being the diameter, the circumference $=8\times3.14159=25.13272$ inches, *Ans.* O.

PROBLEMS.—XX. There is a rectangular piece of land whose length exceeds its breadth by 20 rods. If the field were a square whose side was equal to its present length, it would contain 1200 sq. rods more than it now does. What are its dimensions? J. W. O.

XXI. A and B set out together from the same place and traveled in the same direction. A traveled uniformly 18 miles a day, but after 9 days turned and went back as far as B had traveled in those 9 days; he then turned again, and pursuing his journey overtook B in $22\frac{1}{2}$ days from the time they first set out. At what rate per day did B travel? E. B. P.

ONE OF RUSKIN'S BEST.— All rivers, small or large, agree in one characteristic: they like to lean a little on one side; they can not bear to have their channels deepest in the middle, but will always, if they can, have one bank to sun themselves upon, and another to get cool under; one shingly shore to play over, where they may be shallow, and shore-foolish, and child-like, another steep, under which they can not pause, and purify themselves, and get their strength of waves fully together for due occasion.

Rivers in this way are just like wise men, who keep one side of their life for play and another for work, and can be brilliant, and chattering, and transparent, when they are at ease, and yet take deep counsel on the other side when they set themselves to their main purpose. And rivers are just in this divided, also, like wicked and good men: the good rivers have serviceable, deep places all along their banks, that ships can sail in; but the wicked rivers go scooping irregularly under their banks, until they get full of struggling eddies, which no boat can row over without being twisted against the rocks, and pools like wells, which no one can get out of but the water-kelpie that lives at the bottom. But, wicked or good, the rivers all agree in having two kinds of sides.

EDITOR'S TABLE.

EDITOR'S CHAIR.

To Correspondents. — It gives us great pleasure to receive from our friends contributions for the pages of the *Teacher*. We require a great variety of articles to suit the tastes of our readers, and these must come from different writers. To be acceptable to us and our readers, several things should be observed. Neither we nor the publisher can waste time in attempting to decipher badly-written manuscript. Subjects should be selected that have a practical bearing upon the teacher and school — particularly upon young and inexperienced teachers. We want short articles; we would rather have two short articles on the same subject than one very long one. We expect always to issue the *Teacher* so that it will be received by subscribers on or before the first of the month for which it is issued: we have adhered to this resolution, and intend to unless prevented by some insurmountable obstacle; and to this end we make up our matter before the 15th of each month; no communication received after that time can, under ordinary circumstances, be published. Our friends will see that we must be prompt, and act accordingly. We would return thanks for the many favors received from correspondents, as at no time have we been without plenty of copy. This is right; for if you want a good journal you should help make it: so send in the manuscripts.

'M', postmarked *Oxford, Ill.* Communication received, but will not be published, as we have no responsible name accompanying.

Is Teaching a Profession? — This question, so often and learnedly discussed by aspirants to pedagogical honors, is at last authoritatively decided by legislative enactment. The question is no longer open for debate. The advocates for ranking teaching among the Professions have gained the day. Teaching *is a Profession.* The Legislature so pronounces it, and opens wide the door for all to enter who desire to reap the honors and rewards of the successful teacher.

Let those who have heretofore been so clamorous that their occupation should be ranked among the Professions now step forward and show their actions to be consistent with their words. Come forward, gentlemen; pass through the searching ordeal of an examination, receive the diploma which gives a perpetual license to teach in this state, and let your names be legally enrolled in the Profession the establishment of which you have so ardently advocated. Let no fear of failure, let no false pride, deter you from competition for this honorable testimonial of your entire fitness to stand in the front ranks of your Profession. A nucleus is already formed, around which we would gladly see an army of enthusiastic, energetic, thoroughly-furnished teachers rally.

Code of Public Instruction.— We are gratified to learn that our excellent Superintendent, Mr. Bateman, has it in contemplation to prepare a work which will be of great benefit to teachers and school-officers of every grade, wherein their official duties will be defined and settled in accordance with the principles of law as ascertained by the decisions of the courts and the Department of Public Instruction. Such a codification of our law is necessary for many reasons, which are well set forth in the Superintendent's announcement made in the July number of the *Teacher*. The subjects of the work relate to the State, the County, the Township, and the District, in the order in which they are named, and embrace the following: 1. All matters concerning the election, power and duties of the State Superintendent; 2. School Commissioners; 3. Township Trustees; 4. Township Treasurers; 5. School Directors; 6. Teachers; 7. Parents; 8. Matters not classified in the foregoing.

The work, we hope, will soon be prepared, as it is greatly needed. When completed it will add another leaf to the laurel won by our Superintendent during his valuable period of service as a public officer.

A Good Example.— In the office of E. Sanford, Esq., School Commissioner of Grundy county, we saw, a few days ago, some things worthy of imitation. Not only has Mr. S. the office accounts in regular form as required by law, but he has introduced some additional matters. He has a complete map of every township in the county, showing the location of every school-house, as well as roads, bridges, and farm-houses. He has also a plat, obtained from the State Auditor's office, showing at a glance all the school land for which patents have been issued. For distribution and return of various blanks for township officers, he has tin cases, labeled each with the name of a town, by which means the blanks can be transported without folding and defacing. We might name other particulars, but sum up the whole in this: he is determined to have complete order and system in the office, even if part of the needful expense comes from his own purse. The office in Grundy county is worth less than $300, and in that, as in many other counties, a man suitable for the place can not take the office and perform its duties without detriment to his private business. The office should be better compensated, so that efficient men can take it and afford to do its duties. In a few cases boards of supervisors have made appropriations for the benefit of the commissioner; but such aid is variable and uncertain, and utterly unreliable for permanent or general effort. J. H. B.

Queries.— I see in the newspaper reports of the late conflagration at Troy, N. Y., that *powder* (*gun*powder, I suppose) was used to advantage in extinguishing the flames. Please tell us how the powder is applied, and upon what scientific principles it accomplishes the work. Pupillus.

Gunpowder is frequently used to prevent the extension of great conflagrations, when water or help is wanting and the wind high, by blowing houses to pieces, and thereby making a mass of dense rubbish to burn in stead of an erect and open house. We know of no other use of gunpowder to extinguish fires.

Ed. Teacher.

Please pronounce and give the etymology of *paraffine*, a descriptive epithet of candles lately brought into market. Pupillus.

THE NEW-YORK TEACHER.— A *correspondent* signing himself 'F', observing a brief article in the *New-York Teacher* upon 'Arctic Exploration', and having some doubt as to its correctness, gave a different view of the subject, and quoted as his authority the *Quarterly* and *Appleton's Cyclopædia:* whereupon the Resident Editor, with more feeling than good taste, charges that the *Editor* of "the *Illinois Teacher* for May takes us to task for quoting a paragraph that had become common newspaper property," etc, and asserts that we are "critical" and "unnecessarily captious, without accuracy in its own statements to justify its self-constituted censorship."

1. We, the *Illinois Teacher*, did not take any body 'to task', but simply stated a fact and gave apparently good authority for it.

2. The Editor had nothing to do with it, and is certainly not responsible for the sentiments of contributors.

3. The correspondent had no opinion in the matter except what was derived from good authority.

4. We are not aware that a difference of opinion, when politely stated, based on good authorities, and the authorities given, would justify the above rather unprofessional and ill-natured remarks.

But we will state a case:

The *New-York Teacher* publishes Mr. Wells's Address, which was reported by Mr. Briggs, co-Editor of the *Illinois Teacher*, and credits it to the *Massachusetts Teacher*. That is one fact.

The above address was first published in the *Illinois Teacher*. That is another fact.

Now the conclusion must be, as we state fact number two, that we take the *N. Y. Teacher* '*to task*' for not knowing this matter as we know it: and therefore we are 'critical' and 'unnecessarily captious in our self-constituted censorship'.

Dear Mr. Editor, do n't believe a word of it: we are no such thing.

THE AMERICAN INSTITUTE OF INSTRUCTION will hold its Thirty-third Annual Meeting in Hartford, Ct., in the State-House, on Wednesday, Thursday and Friday, the 20th, 21st and 22d days of August. This will afford our western teachers an opportunity to visit the brethren in the East during the vacation. We hope some one will give us a short but spicy note of its proceedings, as we shall not have the pleasure of being present. The following is the Programme:

Wednesday, August 20th.— At 2½ o'clock P.M. the meeting will be organized for the transaction of business. The usual address of welcome having been made, the President will deliver his Annual Address; after which the following subject will be discussed: 'Methods of Teaching Geography'. At 8 o'clock P.M. a Lecture by Samuel Eliot, President of Trinity College, Hartford, Ct.

Thursday, August 21st.— At 9 o'clock A.M. a Discussion. Subject: 'How can the study of English Grammar and of the English Language be made more efficient and beneficial?' At 11 o'clock A.M. a Lecture by Joshua Kendall, Esq., Principal of Rhode-Island Normal School, Bristol. At 2½ o'clock P.M. a Lecture by Wm. H. Russell, Esq., Principal of Military Institute, New Haven, Ct. At 3½ o'clock P.M. a Discussion. Subject: 'Ought Military Instruction to be generally introduced into our Schools?' At 8 o'clock P.M. a Lecture by Hon. Joseph White, Secretary of Massachusetts Board of Education.

Friday, August 22*d.*— At 9 o'clock A.M. a Discussion. Subject: 'Methods of Instruction best adapted to develop in Pupils the power of *communicating* knowledge'. At 11 o'clock A.M. a Lecture by L. Hall Grandgent, Esq., of the Mayhew School, Boston. At 2½ o'clock P.M. a Lecture by Hon. David N. Camp, Superintendent of Public Instruction of Connecticut. At 8 o'clock P.M. a Lecture by Hon. Wm. D. Swan, of Boston, Mass., to be followed by brief Addresses from representatives of several states.

PROGRESS.— We are glad to observe that a plan has been adopted in Iowa nearly similar to our own, which will place the Profession of Teaching in a higher position than it has heretofore held. A State Board of Examiners, composed of the Faculty of the University, has been established, with power to examine teachers and grant diplomas which shall authorize the possessors to teach in any of the public schools of the state without subsequent examination. The first session of the Board was held at the State University on the 7th of July. We have not yet heard how many teachers availed themselves of the opportunity to take the highest position afforded them in their profession.

The provision for Teachers' Institutes has been continued by the General Assembly, and by the action of the Board of Education it is made the duty of all persons desiring teachers' certificates to attend such institutes, unless they can give a satisfactory reason to the County Superintendent for their absence. Iowa and Pennsylvania are, we believe, the pioneers in this direction, both furnishing the means and opportunity for such meetings, and both requiring the attendance of teachers.

It is to be hoped that Illinois will take action in favor of a general system of institutes, thus giving teachers the opportunity of fitting themselves for their work, and on the other hand requiring them to accept the offered advantage or give place to those who will.

STATE CERTIFICATES.— We trust that the circular of the State Superintendent announcing the Third Examination of teachers for State Certificates will meet with a prompt and hearty response from the teachers throughout the state. If true to themselves, if true to the vital interest confided to their charge, if true to their chosen vocation, they will not lose, by their lukewarmness, this golden opportunity to carry out the views so happily inaugurated by the Legislature. We hope every teacher will take hold of this work in earnest. The teacher who may not find it convenient to attend himself may know some one who can and ought to apply for the diploma. Let him urge upon such the duty of attending the examination. It should be made a matter of personal and professional interest and duty with every teacher throughout the length and breadth of the state to see that there is a full representation at the next examination.

The time and place are fit. The time is during the summer holidays; the place is central and easily accessible from all parts of the state. We say again let teachers take hold of this work in earnest. The Legislature may enact that teaching shall be a Profession, but if it is to be filled with men and women of character and attainments, teachers themselves must do it. If this enactment of the Legislature shall prove an act of folly in stead of wisdom, let teachers thenceforward cease their senseless twaddle about making teaching a Profession. X. Y.

Prof. C. D. Wilber.— We learn from the Rock-Island *Daily Argus* that our friend Prof. Wilber has just completed a series of lectures in that city, on the subject of Geology, which were well attended and gave great satisfaction. The Professor is Secretary and Agent of the Illinois State Natural-History Society. Under his supervision and by his untiring energy and enthusiasm, assisted by a few of like mind, he has adorned our State Normal University with a rich and valuable museum, the property of the Natural-History Society. Our state and schools owe a debt of gratitude to Wilber for his perseverance, under the most discouraging circumstances, in accomplishing the work already performed.

Michigan.— The Report of the Superintendent of Public Instruction of Michigan was received last month, but too late for notice. It contains, with the usual statistics and reports of inspectors, a very valuable treatise on the subject of Graded Schools, with a course of instruction for such a system as he designates. Bro. Gregory is a wide-awake Superintendent, and his Report is calculated to do great good.

Thanks: Graduates' Reception.— We regret that we were not able to attend the Graduates' Reception of the 27th ult. at the State Normal University. The committee will please accept our thanks for their kind invitation. We give on another page a brief account of the examination, with the important incidents of examination week.

State Associations.— The Pennsylvania State Teachers' Association will meet at Reading, Berks county, August 12th, 1862, for a three-days session.

The Massachusetts State Teachers' Association will meet at Springfield, on the 5th of August, for a session of two days.

Didactics.— It gives us pleasure to announce the publication of a series of articles on 'Practical Didactics' from the pen of Richard Edwards, the newly-elected Principal of the Normal University. We expect the first article for the next No.

A Nut for Geologists.— In Macoupin county, Illinois, recently, the bones of a man were found on a coal-bed, capped with two feet of slate rock, ninety feet below the surface of the earth before the run cut any part away. The bones, when found, were covered with a coating of hard, glossy matter, as black as coal itself, which when scraped away left the bones white and natural. Lasalle Press.

Fossil Ivory.— Great quantities of ivory are obtained from elephants that are found imbedded in the ice-fields of Siberia. Scientific American.

LOCAL INTELLIGENCE.

Grundy County.— The first institute in Grundy county was held at Morris, June 30, July 1, 2 and 3. The first day and evening were taken up with organizing and discussion of various educational topics. Owing to the bad condition of roads

and demands of the backward crops, the earlier sessions were not so fully attended as was desirable. Tuesday, drill exercises were conducted in Mental Arithmetic by Mr. Eyre; in Geography by Mr. Sanford, School Commissioner: and in Reading and Grammar by J. H. Blodgett, of Amboy. Wednesday, drills were conducted in Written Arithmetic by Mr. Hyatt; in Reading by Mr. Blodgett. Wednesday afternoon was occupied by discussions upon Primary Instruction, Singing in Schools, and Management of Schools. Monday and Wednesday evenings were occupied by discussions of various educational topics. Tuesday evening a lecture was delivered by Mr. Blodgett. The institute adjourned Thursday noon, with the purpose to meet again in October.

Notwithstanding it was the first institute in the county, it will compare favorably with many in counties where they have been held frequently. Many of our institutes are made up of those who come to see and hear, and not to work. It frequently occurs that the upper classes of some school furnish the material for classes for drill exercises, while not over half-a-dozen *teachers* will come into the work. In the present case no class from the schools was present, and the teachers generally took part in the drills and discussions with commendable promptitude. This is the true way to get benefit from institutes. *Theory* is good for little without *practice;* and teachers who are too retiring to take part in the exercises of an institute will seldom risk making a failure before their pupils by a trial of new modes in the school-room, and hence make little improvement.

Over forty members were present. J.

Springfield to her Sister Cities, Greeting: — The following is an exact transcript from the Superintendent's record of the male department of the Springfield High School, Andrew M. Brooks Principal, for the three consecutive months ending June 24th, 1862:

Average number belonging	37.5
Average number attending	37.05+
Per cent. of attendance	98.6+

This result has been reached by the indomitable energy, industry, patience and skill of the Principal, whose late annual examination was an honor to the city, the state, and the profession. Who can beat the above record? We pause for a reply. Progress.

Peoria. — The Seventh Annual Report of School Inspectors and the Sixth of the Superintendent of the Schools of the City of Peoria is received.

From the high encomiums pronounced by the Hon. Edward Everett upon the schools of this city, we know they deserve to rank among the best, and there is much in these reports that tends to strengthen our previous impression.

The number of pupils enrolled during the year of forty weeks, about 2000. The number of teachers, besides the music-teacher, 36. One division of these schools deserves especial praise — the Fifth-District Grammar, Miss Annie Wentworth teacher, — since with an average of 40 pupils the attendance was 97 per cent., and during the year there were only 10 cases of tardiness. These occurred during the first six weeks that the school was in session. *During the last two terms, of 25 weeks, no cases of tardiness occurred in the school.* In all the schools the average

attendance is very high. Two reasons for this admirable condition may be ascribed, aside from the influence of teachers: the first, that no child is admitted to the schools under seven years; and second, the Board require that a pupil must forfeit his seat if absent six half days in four consecutive weeks — two tardinesses being considered equivalent to a half-day's absence.

Some other regulations we deem of great value in this system of schools, which, aside from the devotion of teachers, do much to promote their welfare. These paper rules, however, never did make a good school; and those who seek to imitate these schools or any other will do well to remember that the fewer rules the better, and when rules are made they should be made to be enforced, and not for — bunkum.

NOTICES OF BOOKS, ETC.

MITCHELL'S OUTLINE MAPS; CAMP'S GEOGRAPHIES; and CAMP'S MAPPING PLATES.

Our attention has recently been called to the examination of the above maps with the geographies, and we have been struck with their great beauty, accuracy, and completeness. The maps are ten in number, and of convenient size; but just here we would suggest to those who desire to purchase that the set would last longer and be more convenient if properly mounted. They are furnished in a large portfolio, in which they are neatly folded, which is a great convenience for carrying.

The Geographies were compiled by Hon. David N. Camp, a practical educator. The maps in the books are like the mural maps, except that they are reduced in size. They are neat, well executed, and finely illustrated. They are compiled upon the topical system.

Accompanying the books may be had ten skeleton maps for the purpose of teaching map drawing. These are constructed on the same scale as those in the books, and are a most valuable auxiliary to the teacher in geographical instruction.

A SYSTEM OF PHONIC ORTHOGRAPHY. By C. P. Merriman, Sup't of Public Schools of the City of Bloomington, Illinois. 8 pp.

We have received a pamphlet with the above title. A portion of it is devoted to an argument in favor of a change from the system in use to one more easily learned, etc.: the remainder to the Phonic Alphabet and illustrations of its use.

We consider the change proposed a very desirable one, but can not hope for its success until all those who are the leaders in the movement can agree upon the number of sounds in our language, their application, and the precise characters by which they shall be represented. Horace Greeley promised to devote a column in the *N. Y. Tribune* to the dissemination of the principles of the proposed change whenever the phoneticians should agree upon a fixed standard of sounds and characters. We think it strange that the friends of the movement did not at once come to an agreement, in order to secure such invaluable assistance. There is no hope for a reform until the reformers unite their efforts and pull together. We wish the movement success when they do.

OBJECT LESSONS: Systematic Instruction in Composition and Object Lessons. By Dr. M. E. Lilienthal, and Robert Allyn, M.A. Prepared by order of the Cincinnati Public- School Board. 96 pp. Cincinnati: W. B. Smith & Co.

We consider this a most invaluable book, and hope it may be put into the hands of every teacher. Though small in size, it is big with suggestive ideas, and would furnish the intelligent instructor with materials for a long time. It will assist in teaching, if properly used, those most difficult of all subjects, conversation and composition. Most of our children can talk; very few of them can converse. It affords themes which, if properly used, will develop this most valuable power — the power of language, the exponent of accurate observation, careful comparison, and sound judgment.

THREE THOUSAND TEST EXAMPLES IN ARITHMETIC: Drill Exercises for Review. Prepared for Ray's Mathematical Course. Cincinnati: W. B. Smith & Co.

We have often wished for just such a book as this *for drill* Few of our arithmetics contain a sufficient number of examples to keep the pupil employed and make him proficient in the principles involved. Here is a cheap little book, containing examples in all the applications of arithmetic usually found in the text-books, but without a rule or principle enunciated. The book may be used in connection with any text-book, but was compiled especially to accompany Ray's Series of Mathematics.

See advertisement of these and other recent publications of W. B. Smith & Co., on second page of cover of *Teacher*.

AMERICAN JOURNAL OF EDUCATION. Edited by Henry Barnard, LL.D. Vol. xi, No. 27.

We welcome this exceedingly interesting quarterly to our table, and renew our commendations of it to our brother teachers, and indeed to all friends of education. It is full of good things and worthy a place in the library of every one interested in the literature of pedagogy. The present number contains a fine likeness of Dr. Samuel G. Howe, the patriot, philanthropist, and teacher of the blind and idiotic, with a memoir of his life. The paper on 'Conversations on Objects' is exceedingly valuable to those interested in primary instruction. Much valuable matter on education in its broadest sense, commencing with the earliest physical management, and relating to dress, diet, and daily habits, is furnished from John Locke and Herbert Spencer. Military Exercises and New Gymnastics are treated of by Major Molineux and Dr. Dio Lewis. The concluding subject is part of an address concerning School Architecture and the Gradation of Schools. The architectural matter is illustrated by a considerable number of cuts of schoolhouses, furniture, ventilation, etc.

The professional teachers of Illinois should all subscribe for this journal.

MUSIC.

Thanks to Horace Waters for the sweet song 'Rock me to Sleep, Mother'. The words are an embodiment of sweet home sentiment, touching and tender, and the music is a fit accompaniment to the words. No one who is blessed with the pleasant memories of dear mother and cherished home will fail to appreciate such music. Horace Waters, Publisher, 481 Broadway, New York.

OFFICIAL DEPARTMENT.

OFFICE OF PUBLIC INSTRUCTION,
Springfield, Ill., August, 1862.

USE OF SCHOOL-HOUSES.

So many complaints relative to the use of school-houses for other than school-purposes have been referred to this Department, that it becomes necessary to state the legal and equitable principles which are believed to control that class of cases.

1. By Sec. 39 of the general act, the supervision and control of public school-houses is vested exclusively in the respective boards of school-directors. It is a part of their duty to see that the school-houses, grounds and appurtenances belonging to their respective districts are kept in good repair, and in a suitable condition at all times for the uses to which they are by law devoted. The guardianship and control of the directors over the school-houses and other property of their district is exclusive; it can not lawfully be delegated by them to others, nor can they be interfered with in the exercise of such control. No school-house can be used or occupied by any teacher or other person or persons without the knowledge and consent of the directors. It is not in the power of the citizens of the district, either individually or collectively, by committees or resolutions, to deprive the directors of their authority in the premises, or to dictate to them the manner in which that authority shall be exercised. They alone are by law responsible, and their discretion and control are and must be commensurate with their responsibility. The citizens may of course petition or remonstrate for or against a particular use of the house; but the directors, under the law, must decide. They are the legally-chosen representatives of the district, to whom, as such, all questions relating to the use of the district property must be referred.

2. But the directors themselves are invested with the supervision and control of school-houses *for the purposes contemplated by law;* and the next important question is, What are the uses to which public school-houses, erected by taxation under state authority, may of *legal right* be devoted? Viewed in this strictly legal sense, the proper answer to this question can not be doubtful. School-houses are built for purely *educational purposes*, and they can not of *legal right* be

employed for any other. By educational purposes are meant those of instruction, of district and school meetings, school elections, etc.—in a word, all purposes directly relating to schools, and no others.

3. While there can be no doubt that the courts would sustain the foregoing opinion if the point were adjudicated upon purely legal principles, yet I desire to express my approval of the time-honored custom which kindly *allows* the use of district school-houses for religious and kindred worthy purposes. Such use, especially in sparsely-settled portions of the country, subserves the public convenience in an eminent degree, and should not, in my judgment, be denied except for flagrant mismanagement or abuse.

I am aware that the privilege is not unfrequently abused in a very wanton manner, and that the use of school-houses for purposes not contemplated by law is even presumptuously demanded as a right, in stead of being gratefully accepted as a favor. Instances are not wanting where parties have availed themselves of the liberality of the directors only to deface the building, break the fences, injure the furniture, mutilate the books, soil the floors, and commit even worse outrages, to the great disturbance of the school, and to the no small cost of the district. In such cases the duty of the directors is clear: the offenders should be expelled, and the doors peremptorily closed against them.

The district can in no case be responsible for any expense incurred by parties using the school-house, under favor of the directors, for other than school purposes. No tax can be levied on the district to pay for the fuel, lights, etc., used by such parties. All of such articles must be furnished and paid for by those who have the privilege of the house; and all loss or damage caused by such use must in like manner be made good by those in charge of the house at the time such loss or damage is sustained. The directors should require of all, as a condition of using or occupying the house, that the building, floors, furniture, books, and other utensils and appurtenances, shall be left in as good condition as they were found, so that the school may suffer no hindrance or interruption, and the district be subjected to no expense.

It is the *abuse* of the privilege that has caused nearly all the trouble. The directors have often been requested, and even required, to allow the school to close before the regular hour, and in some instances to stand closed for several days together, in order to accommodate religious and other societies desiring to use the house for their meet-

ings. It need hardly be said that directors can not lawfully entertain such propositions, whether they come in the form of requests or demands. Any tax-payer of the district has a right to object to such a proceeding, and the law would sustain the objection.

It should not be forgotten that district school-houses are built for educational purposes only; that they are built by a tax levied upon the whole people; that every citizen has therefore personal interests and rights in the premises, and that any and all uses of such school-houses for any other than legitimate school purposes are to be considered as *tolerated only*, and should in all cases be so managed as not to conflict with the schools nor with the uses and purposes contemplated by law.

As already remarked, the liberality that permits, within these limits, the use of school-houses for religious and other praiseworthy objects is to be commended, not condemned. It is a great public convenience, and *need* never conflict with the interests of the schools, or the just rights of individuals. Such use should not be objected to from ill will or a spirit of mere captiousness. Those who so object may in turn find the doors closed against themselves when they desire the use of the house.

This department never raises the question. But when the point *is* raised, as a legal one, it must be decided upon legal principles. And when so viewed, it is believed that if the directors propose to grant the use of the school-house for any purpose not contemplated by law, and their action is *challenged*, they can not proceed without the unanimous consent of the voters of the district, whether the application be for religious or secular uses.

Practically, the exercise of a prudent discretion in the premises by the directors will not be challenged in one case out of a hundred. The aim of these remarks is not to invite or encourage such opposition, but simply to state what is believed to be *the law* when the issue *is* raised.

Directors will continue, as heretofore, to use their discretion and judgment in this matter, consulting the public convenience in a spirit of generous liberality, unless the legal objection is seriously urged by the tax-payers, in which case they will be governed by the rule herein prescribed.

SCHOOLS IN CITIES AND INCORPORATED TOWNS — POWERS OF BOARDS OF EDUCATION.

Sec. 79 of the general school-law makes it obligatory upon all school-boards in cities and incorporated towns to report to the proper school

commissioner the statistical information required by law. In this respect all such boards are subject to precisely the same requirements and duties as trustees, directors, and other school-officers, acting under the general law. In default of furnishing the statistics at the time and in the manner required by law, no part of the common-school fund can be paid to the local treasurer or authorized agent of any school-board of any city or incorporated town.

But it is competent for the boards of education or the lawfully-constituted school-authorities of cities and incorporated towns, where the common schools are organized under special laws and charters, to make such rules and regulations for the management of said schools as to them may seem right and proper. Subject to the provision in respect to statistical returns above referred to, the constituted school-authorities of cities are at liberty to organize and regulate their schools in accordance with the provisions of their special laws and charters. Sec. 79 expressly declares that "this act [general school-law] shall not be so construed as to repeal or change, in any respect, any special acts in relation to schools in cities or incorporated towns."

It is a familiar principle in the construction of statutes that where there are two conflicting acts on the same subject, one general, the other special, the latter governs in all matters within the sphere of its operation; also, that a later act works the repeal of all conflicting parts of a former act. Now all special acts relating to schools, passed *at the time* of or *subsequent* to the passage of the general school-act, are therefore paramount within the established sphere of their operation. And Sec. 79 says expressly that such special school-acts as were in force in cities and incorporated towns *prior* to the enactment of the general school-law are not repealed or changed by the latter. The circle of proof as to the validity of all special acts and charters relative to schools in cities and towns is therefore complete.

The whole subject may be summed up in a single proposition: In the absence of special acts or charters relating to schools, the general school-law is in full force and effect throughout the state; but the provisions of special acts and charters relating to schools supersede conflicting parts of the general act.

That the constituted educational authorities of cities and towns acting under special laws have the power to prescribe their own rules and regulations for the management of their schools is evident, not only from the maxims above stated, but also from the published opinions of the Supreme Court. That tribunal affirms in express terms the right of school inspectors, or boards of education, in cities and towns

to establish such school-districts as to them may seem best; to prescribe such rules for the admission of pupils as they judge proper, under their special acts and charters; and that the courts will not interfere with them in the exercise of such rights except in extreme cases. (*Vide* 20th Ill., pp. 525, 532.)

The applications of these principles are very important. It would seem at first view, from the comprehensive and peremptory language of the 52d section of the general law, that the obtaining of a certificate of qualifications from the school commissioner is in *all cases* a condition precedent to receiving the public school-fund — that there are to be no exceptions to this rule. Such an opinion has been entertained by many school commissioners and other school officers. That this is entirely erroneous is clearly demonstrated by the foregoing discussion.

The requirements of the general school-law in regard to certificates of qualification do not apply to teachers in cities where common schools are organized under special laws and charters applying to such cities. Wherever by special laws cities have been empowered to organize and control common schools, the proper authorities of such cities have the right to prescribe their own regulations in reference to the qualifications of teachers.

In like manner, the proper authorities, in the above circumstances, have the right to establish their own rules with respect to the limits of age within which children shall be eligible to the public schools, and to regulate in their own way all the subordinate details pertaining to said schools.

PRIORITY OF DEBTS DUE THE SCHOOL-FUND — CONSTRUCTION OF SECTION 60.

Some trouble has arisen in adjusting the claims of the school-fund against the estates of deceased persons from the conflicting provisions of the 60th section of the general school-law and the 115th section of the Statute of Wills. *Vide* Stat. Ill., Scates, Treat & Blackwell, p. 1206.

It is held that the 60th section of the school-law, in reference to the priority of debts due from the executors and administrators of the estates of deceased persons to the school-fund, must be construed as so altering or amending the said 115th section of the Statute of Wills as to give said debts priority over all other claims against the estate of the deceased debtor, "except funeral and other expenses attending the last sickness, not including the physician's bill."

COUNTY TREASURERS — THEIR COMMISSIONS ON SCHOOL-TAXES COLLECTED BY THEM.

It is held that county treasurers are entitled to *two* per cent., and no more, upon the amount of the school-tax collected by them.

It has always been the manifest and laudable purpose of the legislature to favor and protect the school-fund. Thus, in Sec. 71 of the general school-act, it is provided that "collectors of the two-mill tax [school] shall only be entitled to two per cent. on the amount collected by them", while for collecting other parts of the revenue they are allowed five and three per cent. Again, we find the same discrimination in favor of the school-fund in reference to the collection of special district taxes. Sec. 45 of the act, speaking of school-taxes levied by the local districts, declares that "the said collector shall pay to said township treasurer the full amount of said tax, retaining from said amount only two per centum, as his fees for collection". To the same effect are the provisions allowing only two per cent. to school commissioners and township treasurers; forbidding costs in all unsuccessful suits for the recovery of debts due the school-fund (Section 78); granting no compensation at all to township trustees and directors for their onerous services, nor to county clerks for the tedious and perplexing labor of computing and extending district taxes; giving priority to debts due the school-fund from the estates of deceased persons; etc., etc. The evidence of the fostering care of the legislature in regard to the school-fund is every where abundant and conclusive.

Viewing the question, then, in the light of the clearly-revealed intention and purpose of the legislature, is it reasonable to suppose that the General Assembly could have intended that the local tax levied voluntarily by the several school-districts, often with much sacrifice to the tax-payers, should be subjected to a reduction of six per cent. before reaching its destination? But this would be the case if the claim of county treasurers to four per cent. on the amount of said special tax collected by them is valid. Two per cent. as collector, two as county treasurer, and two more to the township treasurer, and we have six per cent. to be subtracted from the net amount collected. This could not have been contemplated by those who framed the law.

But those county treasurers who claim four per cent. on district taxes claim it because they honestly think the law allows it. They do not consider the intention of the legislature at all, but base their right to four per cent. upon what they assume and believe to be the plain letter of the statute. It therefore becomes necessary to examine the question from this stand-point.

It is clear, in the first place, that county treasurers are entitled to only two per cent. for *collecting* district school-taxes. They are allowed for *this* service the same compensation that county and town collectors of school-taxes receive, which Sections 45 and 71 of the general school-law declare, in the most explicit terms, shall be *only two* per cent. That said sections of the school-law are *paramount* as to the per centum for *collecting* school-taxes, superseding and rendering inoperative all conflicting parts of the revenue laws, can not admit of doubt. The argument in support of the independent powers of city boards of education, elsewhere stated, is equally conclusive in this case. The school-law is both subsequent to, and special as compared with, the general revenue laws on the same subjects, and hence the provisions of the former have preference over the conflicting provisions of the latter. Indeed, it is now conceded, almost if not quite universally, that no officer can retain more than two per cent. on the amount of school-tax collected, as pay for such *collection*.

It remains to inquire whether county treasurers are also entitled to two per cent. *as county treasurers*. To demonstrate that they are *not*, it is only necessary to state that their relation to special district-taxes collected by them is that of *collector exclusively* — as *county treasurers* they have nothing whatever to do with said taxes, either before or after collection. It is the duty of county treasurers *as such* "to receive all moneys belonging to the county, and all moneys belonging to the state, which by law are directed to be paid to them, and to pay and apply such moneys in the manner required by law."

But moneys raised by special district-tax do not belong to the state, county, or town, but exclusively to the several districts by which they are levied. And the legal custodian of such tax-funds is not the county treasurer, but the *township* treasurer. The former does not disburse said funds, he does not keep or control them, he performs no service *as treasurer* in respect to them whatever, and therefore he is entitled to no commissions as *treasurer*. His whole duty and responsibility in the premises is as *collector*; for his services *as such* the law gives him two per cent. When his duties as collector are performed, his whole relation to the money in question entirely ceases; his official powers are exhausted; he has nothing more to do with the money but to turn it over to the township treasurer, who, as its lawful custodian and disbursing agent, receives two per cent. on the amount so disbursed.

Sec. 45 relates simply and exclusively to the levy, collection and paying over of special district-taxes. It does not by remotest implication call for the services of county *treasurers, as such*. The lan-

guage is "Said *collector* shall *pay to said township treasurer* the full amount of said tax, retaining only two per centum as his fees for collection." What collector? The town collector, or the county collector, according to the organization. Can the town collector retain four per cent. on the amount which *he* collects—two per cent. for collecting, and two more for paying over? No one thinks so. Does he receive the two per cent. for collecting only? Only for collecting. Has he any of the functions of a *treasurer* in the premises? None whatever. Well, the time allowed by law expires, and he turns over the delinquent-list to the county treasurer, who has simply to complete what the former began; he becomes collector; he takes the place and proceeds with the work which the town collector had commenced, and receives for his services the same compensation, two per centum. In all this he is not known as county *treasurer* at all.

In a word, the general school-law, Sec. 45, and not the revenue laws, governs in this matter: that section provides that the '*collector*' of special district-taxes may retain two per cent., and no more, upon the amount collected. The 'collector' may be the town collector, the county collector, or the county treasurer: it makes no difference who the 'collector' may be—town, county, or county treasurer,—the duties are the same and the commissions the same in each case, namely, two per cent., and no more.

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It will be borne in mind that the next examination will be held in this city, August 6th, 1861. Teachers, I believe this movement is identified with the future honor and dignity of our cause and profession in the state. I again commend it, earnestly, confidently, to your regard.

TEACHERS ARE NOT SCHOOL OFFICERS.

It is clear that school-teachers are not '*officers*' under the 72d section of the school-law, and do not, therefore, come within the exemp-

tions provided in said section for such officers. Nor does the reason upon which those exemptions were made apply to teachers. It was understood that the persons to whom those exemptions applied were required to perform very serious, important and perplexing public duties, without any, or with very inadequate, compensation. And it was deemed but right that, in consideration of this, they should be exempt from *some*, at least, of the public burdens. But this does not apply to the teacher, who may, like the mechanic who builds the school-house, contract for and receive the best price he can for his services and labor. He is no more an 'officer', under the school-law, than is the contractor who builds a school-house for a district.

NEWTON BATEMAN, Sup't Public Instruction.

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ILLINOIS TEACHER.

VOLUME VIII. SEPTEMBER, 1862. NUMBER 9.

HINTS UPON THE PRACTICAL DUTIES OF THE TEACHER.

FIRST PAPER.

IN the papers which may be written under this caption, it is by no means the present purpose to exhaust the subject of Practical Didactics, but only to furnish some slight contributions toward the formation of a recognized system of principles, which may be included under that head.

And before proceeding further, let us inquire into the significance of one of the terms we have just used, and which is now becoming somewhat common. What is meant by Didactics? In the newest dictionaries the word is defined as the 'Science or Art of Teaching'. But teaching, considered as a science, is comparatively new; and so, on the principle that, in the formation of language, words are introduced only as they are required to express our ideas, our term, Didactics, is but a new-comer among the fraternity of English words: it has, as Mr. Trench would say, the air and bearing of a recently-naturalized foreigner. But our new notions on educational matters require the use of some such term; and as this word is formed according to the analogy of other words from the Greek, there seems no objection to its use.

Didactics may very naturally be treated under two divisions,—the Theoretic, and the Practical. The first division includes the general principles that constitute the science of teaching, whether they are inferences from the nature of mind or generalizations from experience. The second division includes the application of these principles in actual teaching. These differ from each other as the science of Geometry differs from practical directions in Surveying. And both differ from actually doing the work. A student of mathematics may direct his mental energies to demonstrating theorems relative to the areas of

plane figures; or to giving directions about surveying a field; or, lastly, to actually making the survey. One may employ himself in considering the general principles that underlie the art,—as, for example, the principle that the exercise of any power of the mind or body tends, within certain bounds, to enlarge and intensify that power; or he may tell how a good school may be taught, or an individual educated; or, finally, he may engage in the actual work of teaching school or educating a child.

In these papers we propose to inquire into the best methods of doing certain things in school,—of accomplishing certain results. And such an inquiry may certainly be included in the subject of Practical Didactics. And as we are to be guided by practical rather than logical considerations, let us take up the different points of our subject in the order in which they would occur in actual teaching, rather than in that indicated by their logical relations.

Suppose, then, a young person to have entered into an engagement to teach a school. On the morning when it is to begin, he finds his way to the school-house. What shall he do first, and how shall he do it? Now it has been said many times, in connection with this matter of teaching, that first impressions are always lasting: and if so, how important that on this first morning of their acquaintance the new instructor should produce in the minds of his future pupils a favorable opinion of himself! And the point to determine is how this shall be done.

For this purpose, one of the first requisites is that the teacher have his eyes and ears open, so that he may at once learn something of the character of the members of his school. In many places it would be well to have some conversation with the children before the time for beginning the first day's session,—not necessarily upon school, or any thing relating to it. The rule should be to let the discourse run into the most natural channel; for the object of the whole is to establish a good understanding between teacher and pupil. In order to be prepared for making the best use of such a conversation, the teacher should know as many things as possible, and particularly such things as children or young people feel an interest in. This will enable him naturally and quietly to impress his pupils with a sense of his power and worth; and if he is good-natured, sympathetic, and kind in his manner, evincing a ready willingness to assist them in every way in his power, then does he occupy a high vantage-ground, and enter upon the discharge of his duties with much in his favor.

But the assemblage of children may be too noisy and boisterous for this mode of beginning. If so, the teacher must be quick to see it,

and must resort to some other method. The best thing to be done may be, quietly but carefully, to observe the movements, until the time arrives for calling the school to order. This should be done as quietly, but as promptly, as possible. Every child should be in his seat at the proper moment, and should be made to feel that this is a matter of vital importance. On this subject the teacher should leave no room for doubt. Who can calculate the vast sum of evil that has flowed into the world from the neglect of punctuality and promptness! There are some men who in their course through life are invariably 'just a little too late' for every thing good and great, simply because they did not learn when children to be always 'on time'.

After calling the school to order, the next thing is to get the names of the pupils. Of these a list must be had; and the teacher must also learn them, so that he can readily call any pupil by the name which belongs to him. Now, this matter of taking the names of a school may seem like a very small thing, and we do not wish to be understood as intending very greatly to magnify it. But suppose two teachers, one of whom, quietly, but vigorously and effectually, makes out a list of the names in his school, and in the course of half an hour is able to call any boy or girl by the right name promptly and without fail; while the other, after occupying a long time in making out his list, blundering here and misunderstanding there, goes on to misapply these little terms, by shouting Lucinda when he means Jane, and Ebenezer when he means John, to the intense delight of every lover of disorder: suppose two such teachers,—and so far forth which has been the more successful? The slow, slovenly, inefficient blunderer, no less than the careful, wide-awake teacher, will be very sure to show himself even in the slight matter of taking the names of his pupils.

And now, this mass of young humanity, standing before the teacher as the material on which he is to work, is to be ORGANIZED—to be so arranged into groups, to have its energies so directed, to have the places of individuals so adjusted, that each shall work harmoniously with every other in accomplishing the great purpose of the school. We pass, therefore, to the discussion of

THE ORGANIZATION OF A SCHOOL.

The Organization of a School divides itself naturally into two parts: the arrangement of the scholars into classes, and the division of the daily session so as to give each exercise its proper amount of time. How often it happens in our country schools that both of these important matters are settled (if that may be called settled which is al-

lowed in the most slipshod manner to regulate itself) with little or no thought as to what is demanded by the best interests of the school or the educational wants of the pupils! On the manner in which a school is organized, in these two particulars, will depend the very essence of its success. You may as well expect a watch to keep good time when its wheels and springs are thrown together, pell-mell, as to expect a school to bring forth the fruits of a systematic education when its forces and instrumentalities are allowed to operate in similar confusion. First and foremost among the elements of success in any school is its thorough and systematic organization.

How, then, and upon what principle, shall the children be arranged into classes? Indeed, what need of arranging them at all? Why not allow each young idea to shoot upon its 'own hook', like the Jerseyman of Revolutionary fame? For those who hold that there is no science in teaching, that the instructor has only to tell what he knows, this last method would seem to be as useful as any. But when we come to think of adapting means to ends, of adjusting our teaching to the wants of our pupils, this hap-hazard method becomes very inadequate. *The same instruction will not do for all:* this is the principle that makes classification necessary. For in every large school may be found a certain number each of whom requires nearly the same intellectual treatment; and these are put together, to be taught at the same time and influenced, to some extent, by the same incentives. The true test for the classification of pupils, therefore, is their *capacity for receiving instruction.* But this is usually very difficult to ascertain so as to be mathematically measured, and so it is usual to take as a substitute the attainments of the pupil, or the amount of knowledge he has already acquired. E.

COMPOSITION-WRITING.—Number VII.

We proceed with our discussion of the selection of subjects. Having shown in the last two numbers of the *Teacher* how themes may be derived from the studies of the pupil, as well as the mode in which they may be presented to make them more interesting, we propose in the present article to make a few random suggestions as to some methods of procuring topics.

We can not say how it may be with other teachers who are in the habit of assigning subjects to their composition-classes, but as for our-

selves, there have been times in our experience when our supply of themes has been completely exhausted: in vain did we task our puzzled brain to meet the pressing demands of Timothy or Matilda for 'something to write about'. Things enough we could call to mind, of course, but they were not well suited to the abilities of the applicants: these, for instance, are too puerile; those, too profound. Our judgment in the matter fastidiously held out for topics precisely fitted to develop in the best possible manner the thinking powers of the scholar. Such an exigency, therefore, some times arising, the teacher should always meet his class with a carefully-prepared list of questions equal to the number to be supplied; for, should he trust to his fertility at the hour itself, he may fail, and in the hurry give the most inappropriate themes.

The list being provided, do not assign the subjects promiscuously to the pupils as they sit or stand, but have some regard to their taste or culture. To illustrate: we came before the class the other day with the following selection: Berries—their kinds, uses, etc.; A Garden and its contents; Moving West; Condition of countries under Mahometan Religion. These we thus distributed, involuntarily reasoning in a style something like this: "Berries will suit Martha, as she is full of a vigorous life inclining to all sorts of pleasure—love of strawberries included; Garden shall be given to Emma, for its pleasant domestic associations are in harmony with her retiring disposition; Moving West will afford Anna an opportunity to indulge her vein of tender sentiment; while the Mahometan idea will call for some display of the historical and general information which Alice possesses.

But we are to speak of some methods of securing themes. First, then, for the benefit of teachers who may not think so far, we will mention that there are works containing subjects in abundance, as Parker's Aid to English Composition, Quackenbos's Rhetoric, McElligott's American Debater, Barnard's Object-Teaching, and many other treatises of this kind. One-half, however, of the topics found in these books are too hard for the pupils of our common schools—being, in fact, not intended for them, but for students of more advanced course. To show this we need only cite such as Radicalism, Decision of Character, Contemplation, Literary Empiricism, etc., taken from one before us.

In the second place, not being able to find altogether what he wants in books, the teacher must think out an assortment of questions for himself. Let him take some *general* thought, and its specific divisions will give quite a variety in themselves. For example, on referring to my Memorandum of Composition Subjects I find the following:

Some animal of water, air, or land. This gives the choice of the whole kingdom. Again: Some race; some religion; some nation; some journey; some book; some man. Now resolve these genera into species and individuals, and you will have quite an extensive inventory ready for use.

In the third place, see whether the season or the locality will not suggest. Themes drawn from surrounding nature or passing events often elicit the most cordial response from the pen of a practical scholar otherwise insensible to a refined or classical idea. Such are the Prairies of the West, and the Mountains of the East, with the thousand different objects found on each; such are the changing seasons and their varied associations; such are the occasional holidays; and such are these war-times, bringing a world of new thought into our quiet American life.

Fourthly, after an object-lesson has been given any thing of a similar nature may be assigned for a composition, as the pupil will be more competent to investigate its properties. W. W. D.

STERLING, August, 1862.

SCHOOL POLITENESS.

SOME months since the *Teacher* gave us an article upon the 'Rights of the Pupil'. One of the rights enumerated was polite treatment. Perhaps we may be profited by considering the questions What is politeness? What is its use? and How can it be cultivated among teachers and pupils?

The history of the word 'polite' is instructive. We had always supposed it to come from the Greek πόλις, a city—'urbane', from *urbs*, a city, being its fellow. But if we trust Webster, we derive it from 'polish', and 'polish' from the Latin *polio*, to file, to smooth.

A polite man, then, is a polished man. Is he nothing more than this? Derivation seldom gives us a full definition. Time, also, adds to or detracts from the power of a word. *Urbanity* is now something more than city manners. *Court*-esy was once the go-between of dissolute monarchs and fawning courtiers; *courtesy* is the mark of Nature's noblemen. So the *polite* man of to-day is not simply a smooth fellow. That bearing which was once the pretense, or at best the show of good-will, is now the natural index of a noble heart. The study of this common word will give us new insight into our own characters, a new application of a teacher's duties and privileges.

"*But what is the use of being polite?*" your pupils some times ask. Mere outward courtesy has its value. It is the man's dress—a cloak, perhaps; but a cloak may grace the form of a prince, as well as hide the stiletto of the assassin. Without it man is morally a savage, undressed, and even unpainted; with it, mere selfishness, clad in fair raiment, sits among us the arbiter of strifes, the preventer of crimes. Then, too, like the clothing of the physical man, it warms as well as ornaments. The garments which we daily wear (and we wear these through deference to others) modify the structure of the body and, as a part of it, the brain, the agent of thought. The soul, in the exercise of politeness, clothes itself with self-denying acts, and these acts refine the soul.

If we consider politeness as the expression of heartfelt good-will, we need not ask its use. Its name is peace. It is kindred to the 'peace which passeth all understanding'. There is a common error that words to be effective must be rough. When David would kill Goliath, he chose five *smooth* stones from the brook, and the first of them sank into the forehead of the man of Gath. The surgeon's knife, which whips out a tumor before the patient really feels the first cut, is a polished blade. The words which do us good are those which imply deference, sympathy, kindness, even when they give reproof.

But how shall politeness among our pupils be secured? How shall the courteous be kept from rudeness? and How shall the rude be made less rude? In this department of instruction the common order, precept and example, must be changed to example and precept. And how shall teachers be made fit examples?

Physical health has much to do with this. The body is something more than the camping-ground of the soul. It is the soil in which that divine plant has root. It nourishes, as well as upholds. We all know men who are called whole-souled fellows, and who really are such, simply because their digestion is good and their blood pure. Noble purposes are often concealed and some times thwarted by the petulance which comes from ill health. Especially is this true of those who must meet the perplexities of the school-room. Most of our teachers are physically so weak that the loss of a few hours' sleep makes them any thing but gentlemen and ladies. Then, if you would teach politeness by example, take care of your health.

Great improvement may be made in our mode of addressing our pupils. The haughty, peremptory tone which some consider necessary to insure obedience often defeats its own end. The other extreme is represented by that Nile boat-captain of whom a traveler relates that he always prefaced his orders to the sailors with "Gentlemen, will

you do me the favor ——?" The former as well as the latter character is often assumed from sheer cowardice. A boy once told us that in two years his teacher, the principal of a school of eight hundred young pupils, had never spoken a harsh word. We believed him, for we knew the school and its teacher. Discipline was perfect enough there to suit the most exacting. The teacher was manly, generous, just.

If we would make others noble, we must cultivate in ourselves that self-reliance and self-control which we wish to see in our pupils. Not merely the unkind word and look are to be restrained: the unkind emotion is to be suppressed, killed. We must put to our thoughts, our words, our tones, the question 'What manner of spirit are ye of?'

Some direct instruction may be given. In this we would follow the same course as in other moral teachings. Instances of courtesy in school may be commended; facts which occur in the neighborhood may be used. A great multitude of examples may be taken from books; for the picture which the story paints is as real as the living example. The best influences which we ourselves have felt have come from books, or from thinking, book-taught people.

In attempting to teach courtesy we meet with many obstacles, those which arise from the dispositions and circumstances of our pupils, as well as those which come from our own character. In the larger towns there is always a shadow of the amenities of life; for this is required by fashion. But some of our teachers are placed where there exists not even this allurement to a courteous life. There the teacher must make public sentiment upon this subject, among parents if he stays long enough, but among his pupils at all events.

We believe that most teachers may become more kind without being less firm. We would, most of us, upon reflection, recognize the fact that the teachers who have benefited us are those who have combined great firmness with great courtesy. This should teach us that a similar course will tend to make our own way smooth, and render the life of our pupils glad now and useful in the future. R.

Necessity of Moral Education.—The exaltation of talent, as it is called, above religion and virtue is the curse of the age. Education is now chiefly a stimulus to learning; and thus men acquire power *without the principles which alone make it good.* Talent is worshiped; but if divorced from rectitude it will prove more of a demon than a god. Channing.

AN HOUR AT THE OLD PLAY-GROUND.

I SAT an hour to-day, John,
Beside the old brook-stream,
Where we were school-boys in old time,
When manhood was a dream.
The brook is choked with fallen leaves,
The pond is dried away:
I scarce believe that you would know
The dear old place to-day.

The school-house is no more, John,
Beneath our locust-trees;
The wild rose by the window-side
No more waves in the breeze;
The scattered stones look desolate,
The sod they rested on
Has been plowed by stranger-hands
Since you and I were gone.

The chestnut-tree is dead, John;
And, what is sadder now,
The broken grape-vine of our swing
Hangs on the withered bough;
I read our names upon the bark,
And found the pebbles rare
Laid up beneath the hollow side,
As we had piled them there.

Beneath the grass-grown bank, John,
I looked for our old spring
That bubbled down the alder-path,
Three paces from the swing;
The rushes grow upon the brink,
The pool is black and bare,
And not a foot this many a day,
It seems, has trodden there.

I took the old blind road, John,
That wandered up the hill:
'T is darker than it used to be,
And seems so lone and still!
The birds sing yet among the boughs,
Where once the sweet grapes hung,
But not a voice of human kind
Where all our voices rung.

I sat me on the fence, John,
That lies as in old time,—

That same half-panel in this path
We used so oft to climb,—
And thought how o'er the bars of life
Our playmates had passed on,
And left me counting on this spot
The faces that are gone.

HENRY MONFORD, in L. C. Jour. of Educ.

HOW THEY USED TO SPELL.

THE most extraordinary spelling- and indeed reading-machine in our school was a boy whom I shall call Memorous Wordwell. He was mighty and wonderful in the acquisition and remembrance of words —of signs without the ideas signified. The Alphabet he acquired at home before he was two years old. What exultation of parents,— what exclamation from admiring visitors! "There was never any thing like it." He had almost accomplished his Abs before he was thought old enough for school. At an earlier age than usual, however, he was sent; and then he went from *Ache* to *Abomination* in half the summers and winters it took the rest of us to go over the same space. Astonishing how quickly he mastered column after column, section after section, of obstinate orthographies. Those martial terms I have just used, together with our hero's celerity, put me in mind of Cæsar: so I will quote him. Memorous might have said in respect to the host of the spelling-book "I came, I saw, I conquered." He generally stood at the head of the class, each of whom was two years his elder. Poor creatures! they studied hard, some of them, but it did no good! Memorous Wordwell was born to be above them, as some men are said to have been 'born to command'.

At the public examination of his first winter, the people of the district, and even the minister, thought it marvelous that such monstrous great words should be mastered by such a 'little mite of a boy'! Memorous was mighty also in saying those after-spelling matters, the Key, the Abbreviations, Punctuation, etc. These things were deemed of great account to be laid up in remembrance, although they were all very imperfectly understood, and some of them not understood at all.

Master Wordwell was a remarkable reader, too. He could rattle off a word as extensive as the name of a Russian noble, when he was but five years old, as easily as the schoolmaster himself. "He can read in the hardest chapters of the Testament, as fast agin as I can."

said his mother. "I never did see nothin' beat it;" exclaimed his father, "he speaks up as loud as a minister." But I have said enough about this prodigy: I have said thus much because, although he was thought so surpassingly bright, he was the most decided ninny in the school. The fact is, he did not know what the sounds he uttered meant. It never entered his head, or the heads of his parents, and of most of his teachers, that words and sentences were written, and should be read, only to be understood. He lost some of his reputation, however, when he grew up toward twenty-one, and it was found that numbers, in more senses than one, were far above him in Arithmetic.

One little anecdote about Memorous Wordwell, before we let him go, and this long chapter shall be no longer.

It happened one day that the 'cut-and-split' for the fire fell short, and Jonas Patch was out wielding the ax in school-time. He had been at work about half-an-hour when Memorous, who was perceived to have less to do than the rest, was sent out to take his place. He was about ten years old, and four years younger than Jonas. "Memorous, you may go out and spell Jonas." Our hero did not think of the Yankee sense in which the master used the word *spell:* indeed, he had never attached but one meaning to it, whenever it was used with reference to himself. He supposed the master was granting him a ride extraordinary on his favorite hobby. So he put his spelling-book under his arm, and was out at the wood-pile with the speed of a boy rushing to play.

"Ye got yer spellin'-lesson, Jonas?" was his first salutation.

"Have n't looked at it yit." was the reply. "I mean to cut up this plaguy big log, spellin' or no spellin', before I go in. I had as lieve keep warm here choppin' wood as freeze up there in that 'tarnal cold back seat.

"Well, the master sent me out to hear you spell."

"Did he? Well, put out the words, and I 'll spell."

Memorous being so distinguished a speller, Jonas did not doubt but that he was really sent out on this errand. So our deputy spelling-master mounted the top of the wood-pile just in front of Jonas, to put out words to his temporary pupil, who still kept on putting out chips.

"Do you know where the lesson begins, Jonas?"

"No, I do n't; but I s'pose I shall find out now."

"Well, here 't is." (They both belonged to the same class.) "Spell A-bom-i-na-tion."

Jonas spells: A, b-o-m bom, abom (in the mean time up goes the ax high in the air), i, abomi (down it goes again chuck into the wood), n-a na, abomina (up it goes again), t-i-o-n tion, abomination. Chuck

the ax goes again, and at the same time out flies a furious chip and hits Memorous on the nose.

At this moment the master appeared at the corner of the schoolhouse, with one foot still on the threshold. "Jonas, why did n't you come in? Did n't I send Memorous out to spell you?"

"Yes, sir; and he has been spelling me: how could I come in if he spelt me here?"

At this moment the master's eye caught Memorous perched upon the top stick, with his book open upon his lap, rubbing his nose, and just in the act of putting out the next word of the column.

Ac-com-mo-da-tion, pronounced Memorous, in a broken but louder voice than before; for he had caught a glimpse of the master, and he wished to let him know that he was doing his duty.

This was too much for the master's gravity. He perceived the mistake, and, without saying more, wheeled back into the school-room, almost bursting with the most tumultuous laugh he ever tried to suppress. The scholars grinned in sympathy.

But in a few minutes Jonas came in, followed by Memorous with his spelling-book, who exclaimed "I have heard him spell clean through, and he did n't spell hardly none of 'em right."

The master could hold in no longer, and the scholars perceived the blunder; and there was one simultaneous roar from pedagogue and pupils — the scholars laughing twice as loud and uproariously in consequence of being permitted to laugh in school-time, and to do it with the accompaniment of the master.

From 'The District School as It Was.'

A GOOD SCHOOL PAYS.

Yes, my friend, a good school does pay, in more ways than you may think. It pays well, no matter how you consider it. It pays in a moral point of view, it pays intellectually, and it pays when viewed in the light of dollars and cents. The money which you individually invest annually to support it will bring to you and yours a return the full value of which can not be truly measured by the standard of dollars and cents. It enables you to educate your sons and daughters within the shadow of your own 'roof-tree', with associates whom they have known from early childhood, and to whom you, too, are no stranger.

A good school is confessedly the most powerful and available means

of strengthening and disciplining the moral and intellectual powers and capacities of your children, and of developing and cultivating all that is noble and ennobling in their minds and hearts. It is a fountain from which healthful and invigorating streams of knowledge are continually flowing to each house and home in your neighborhood, adding greatly to the individual happiness of all. A peaceful, healthy influence is constantly diffused by it, which makes the neighborhood a far more desirable place to live in than the one that has a *poor school.*

You will admit, without argument, that your children are far happier in a good school, under proper training, than they can possibly be in a poor one, where they, very improperly, *train the teacher;* and besides, you will admit, too, that they will improve much faster and much more thoroughly in the former, and be at least a hundred per cent. better fitted to engage in life's duties and bear its responsibilities when they arrive at the age of maturity, than they would in the latter.

If you have such a blessing as a good school in your district, do all you can to sustain and support it and to keep it such; and if, perchance, little George Washington Jones, the pet of your family, should come home some day smarting with pain, with his dear little, roguish, delicate flesh quite red from a smart application of a flexible rod, for some of his mischievous pranks and rebellious capers; or if Miss Clara Augusta should be detained after school to finish a lesson which her *indolence* alone prevented her from completing,—*do n't* fly into a passion, and call the teacher all sorts of hard names and make ill-natured remarks about him *in their presence*, but calmly tell them that they *must obey* him if they do not wish to be punished.

If you have *not* a good school, then you are more or less to blame for it yourself, and may have contributed much, directly or indirectly, to make it such as it is. You have not, do you say, indignantly? Well, friend, let us see. Did you, when your last teacher was employed, visit *his* school, *your* school, as it was *your duty* to do as a *patron*, as a friend of your children and of him to whom was committed the development of all that raises them above the brute creation, and cheer him on by your presence and personal influence to make it what it should be? Or did you stay away and learn from your children what sort of a man (or woman) the new teacher was, and then, if you did not like him as described by them, go to this neighbor and that one and say or insinuate that you thought *thus* and *so* of him? And were you not always more ready to believe and circulate all ill-natured rumors and malicious reports about him and his school than you were those which were in his favor?

A good school pays! Let all directors, let all patrons, let every man, woman and child in the district remember this; and that a poor school is a dear one at any price. Remember, Mr. Director, that most cheap things are spurious articles, and that you must pay for a good one if you get it,—you can not get it short of the market price. And Mr. Patron, do n't go about grumbling because the directors have paid a few dollars more salary this year than they did last, until you are *quite sure* that they will not get full 'value received' for every dollar thus expended. Remember, too, that a short good school is far better than a long poor one. And when you attend district meetings, see that no sectional or party strifes are permitted to enter into your deliberations. Vote a liberal tax to support your schools, and elect men of intelligence, good judgment and ability for school-officers, and do your own duty as patrons, and you too will say "a good school pays."

M. V. B. S.

OBJECT-LESSONS.

MUCH is said of late about object-lessons. Some teachers never have heard of them: some who hear of them do n't know what they mean: and others would like to have a book to teach them how to give such lessons; but as they have no book, and can not afford a dollar to buy one, they do not try to give them. Perhaps a little lesson without a book may interest a few beginners.

The pupils of our principal grammar school were requested to write out the names of all the articles of which they could think made of ivory. Nearly 1200 were collected, some lists of over 200 by children of ten years old. Then all the animals which produce ivory were required, and the children were eager to look them up. Then vegetable ivory was the subject of a lesson, and all were interested in knowing something about this curious production. Fossil ivory might have been added, but was not treated of. The ivory-producing animals were sketched upon the board, the locality and habits of each discussed; the method of capture and the quantity of ivory furnished were also discussed. The names of the articles formed a series of spelling-lessons, their uses another series; and the minds of seven hundred children were kept on the alert quite four weeks during a few minutes (not over ten) of each day. More than that. The teachers were provoked to study, parents and friends were waked up to

new interest, and the community was interested in the school-work. Try it, you who can not interest your pupils in *names* which mean as little to them as the jargon of a barbarous language does to you.

H. L. B., in N. H. Jour. of Educ.

WRITING FOR CHILDREN.

It may be safely assumed that an intelligent child will understand any narrative or didactic effusion which an ordinary grown person can. Abstract ideas children can not master: in which respect, again, there is but little difference between them and all the adult world, except with the rare few; for men who are intelligent and intelligible in abstract thought are full as rare as poets, artists, or other men of genius.

The clear style of Addison is a model for juvenile writing. Neither are children so very much interested in childish things that they require those who serve them to write *down* to their level: on the contrary, children aspire; they are curious of grown-up knowledge. The narratives which missionaries send home, the accounts which travelers give of their sights and experiences, the narrative of any series of events that would interest the parents, will interest the children. As a general rule, that is the best writing for children which, being read aloud in the family, is found to be most interesting to the parents and grown-up children. The Pilgrim's Progress is the best child's book that was ever written, except the narrative books of the Bible. Robinson Crusoe brings together the old man and the child on his knee in one like interest. Scott's poems belong to the child's library, because they were written to the sensuous and practical imagination of men.

The art of writing for children lies first in the subjects selected, and next in forgetting that there is a minnifying style of literature, which, aiming to be childlike, succeeds only in being childish. The true art consists in writing manly things in manly English.

It is true that much juvenile literature that has established its credit is clothed in what may be called nursery style; but it has succeeded in spite of its diluted English, and not in consequence of it. That must be excellent material, and very happily conceived, that can maintain itself long in juvenile English.

It is just as important to begin early to give to children a good taste and a sound judgment in literary matters as to begin early with

any other part of their training. School-libraries and religious juvenile books need sifting, not simply because a literary nursery *patois* is ridiculous, but because it is mischievous. It corrupts the taste and misleads the judgment at the most important period of life.

In a nation that demands so much of its citizens, in which all are expected to become readers, and to some extent writers or speakers, is it of no consequence what is the literary character of those books through which children first form their tastes? The mortuary reports speak of numbers of children annually dying from water on the brain. Milk-and-water on the brain is even worse, for the children do n't die. Selected.

LIFE INSURANCE.

THERE is no subject which impresses itself with greater force upon a thoughtful man's mind than the consideration of the question What will become of my wife and children in case I am suddenly cut off and they are left without my care and protection? This case commends itself strongly to all men, but to no class more forcibly than that of the teacher. Teachers are as a class, perhaps, no more liable to be suddenly removed than men of other professions; and on this account the appeal to them to take out a policy of insurance in favor of wife and children, payable at their death, is of no more weight than with other men. But there is a view of the case which is applicable to most of that profession. Teaching is not a certain or a lucrative business. No one sets out in life with any great ideas of pecuniary success in that business. It is usually very uncertain, both as to time, place, and amount. As long as a faithful, good teacher labors, he can make a comfortable support; but if he is providentially removed, his family, dependent on him entirely for every thing, are left without means, and are thrown on the charity of others for support. It is well to exercise a Christian faith that he who takes care of the sparrows will not fail to take care of our helpless ones; but if we do not use all the means given to provide for those who are dependent upon us, no amount of faith will save them. This subject should be brought to the attention of all men, and it is therefore eminently proper that it should be introduced to the notice of the teaching fraternity through their journal. Every thing that tends to improve the condition, further the success or promote the interest of teachers comes properly within our province.

The principles upon which the system of Mutual Life-Insurance Companies is founded are based upon the tables of mortality collected and compiled for a long series of years, so that the results they have arrived at are not the effects of chance, but the deductions of reason derived from the most authentic sources. The principle of mutual benefits is an admirable one, and tends to give confidence to the management of such institutions.

No one can afford to be without the satisfaction that, in case of his sudden death, those dependent upon him will be provided for. The most harrowing reflections arise upon a sick-bed, tending to prevent a restoration of health, when there has been no provision made in health for the preservation of the family. It is not a pleasing idea that when the head of the family is gone the other members will be scattered, and perhaps left to the charity of strangers. Every man who loves his home and his family should provide for this event while in health and strength. A small amount laid aside each year would insure comfort and security to the family, and thus prevent those accidents which so often happen, bringing distress and dismay into once happy households.

There is an objection often made to the taking-out of a policy of insurance, that if the premium is not paid punctually the premiums of previous years are all forfeited. This is not so in all companies. There is a plan of of insurance called the ten-years plan, wherein persons may secure a policy for any life by the payment of a premium for ten years. If the party taking the policy fails at any time after the first two years to pay, his heirs, or the persons for whose benefit the policy was taken, will receive as many tenths of the whole as there were years paid. Thus, if a policy is taken for a thousand dollars and the premium is only paid for three years, the persons entitled to the money at the death of the policy-holder will receive $\frac{3}{10}$ of that amount, or $300.

We would direct attention to the advertisement of the *New-York Equitable Life-Assurance Society*, in this number of the *Teacher*. This company is comparatively new, and yet it has won its way into the public confidence to such an extent that it has outstripped all competitors.

We advise every teacher to anticipate the dark period of distress which may at any moment come upon his home, by securing a competence to his family. Send for a circular.

UNION GRADED SCHOOLS.—Number V.

One of the most important considerations affecting permanent success is the judicious organization of the Union Graded School System. No definite plan can be laid down which may be relied on, for the reason that there are so many circumstances to be taken into consideration—no two places having in all respects the same conditions which affect the schools.

One of the chief causes of failure in the organization of Union School Systems is the determination to imitate exactly a system which is working successfully in some other place. Servile imitation in any thing connected with schools or teaching is extremely pernicious, and always fails to accomplish the desired end. We must have some *general principles*, however, to guide us, and in the arrangement of details must be governed by the circumstances of the case. No two schools can be exactly alike in these details, although each may be good in its place. The conditions which affect the organization of such a system may be the number of pupils, their advancement, the size and shape of the school-district, the number, size and location of the school-buildings. Each of these elements will enter into and modify the arrangements, and therefore it is apparent that no definite rule will be applicable.

The proper adaptation of the principle of division of labor to schools must depend, in the beginning, upon the wisdom and discretion of the principal or superintendent. In speaking of the division of labor as applicable to large establishments involving both capital and labor, it was apparent that, however intelligent and energetic the directors or trustees might be, still there must be a skillful professional head, well versed in all the details of the business, in order to manage successfully. The duties devolving upon the superintendent will be various as the circumstances by which he is surrounded. It may be necessary, from the number and character of the schools, that his whole time be devoted to the duties of superintendence alone, or, in different circumstances, it may be proper for him to devote more or less time to the instruction of classes. He should be a man of such age and experience that his assistant-teachers could look up to him for counsel and support, could rely upon his judgment, and have confidence in his integrity as a gentleman and a friend. He should have those qualities which will inspire the community with confidence and respect, and make them yield their support in the expectation of mutual advant-

age. The selection of superintendent should be made, if possible, with reference to permanent employment, both for his sake and that of the schools. As no intelligent company, united for commercial or manufacturing purposes, would be guilty of selecting a new set of employés every six or ten months, so no school-directors should be guilty of the same excess of folly. Mutual acts of kindness, charity, and good will, based upon a good foundation of common sense, should make more permanence in the business of teaching.

As the success and reputation of the superintendent depend greatly upon those who work under his supervision, it is but fair that he should be consulted in their selection, and, other things being equal, that his preference should be adopted. So much depends upon the kind, cordial coöperation of the corps of teachers, upon their similarity of sentiments in connection with their work, that every thing, not repugnant to reason and common sense, should be done to insure harmony and success. We have known instances where the principal and his associates were at continual variance, and one case where the principal and his first assistant did not speak to each other for nearly a year,—she trying constantly to impair his influence in the school, and he suffering from it, but unable to prevent the mischief and folly she was bent on working. Of course, that school was an entire failure—a year spent to the injury of the children and the dissatisfaction and disgust of the community.

Having determined the number of teachers necessary and made the appointments, the time approaches for the opening of the school. This is one of the most difficult and trying operations connected with the whole work, and requires all the wisdom, coolness, patience, charity, good nature, versatility, and courage, that the superintendent can command. All the Christian virtues and some of the heathen ones will probably find a wide field for exercise. Happy is he who has at this critical time a board of directors who can appreciate some of the difficulties of the situation, and have courage to sustain the teachers until they may demonstrate the correctness of their judgment and their ability to perform their work.

When the schools open, several hundred children come in. Each one is as good as the other, and so each one has a claim to be attended to first. Of course, there is a great diversity of talent and acquisition, as well as of size. If the grading were based upon the size of the pupils, it would be a comparatively easy matter to arrange them. But, unfortunately, there is no such apparent standard to measure them by. They must be examined; and this takes time, and talent, and skill: for if a graded school means any thing, it means the arrangement of

pupils in classes according to their scholarly attainments and intellectual improvement. It will probably add to the perplexities of the occasion if a message to this effect is sent from home: "Mother says I shall go to school to Miss A., as she thinks she is the best teacher." "Father says I must go to the high school and study orthography and ornithology." "My parents say they won't get me any new books"; and "Mine", says another, "say I must have some new books, because I 've been in the old ones long enough." In the mean time the organization is slowly progressing, in spite of the many difficulties thrown in the way by the ignorance or thoughtlessness of parents or the willfulness of children. The organization of a school upon the attainments and qualifications of the pupils may require several weeks; but in addition to this is the selection of studies, the formation of classes, the arrangement of the programme of each day's work, and with it all the government and management of the school. Such a labor is no insignificant work. We will continue the subject in our next.

STATE CERTIFICATES—THIRD EXAMINATION.

AGREEABLY to the appointment of the Superintendent of Public Instruction, under the amendatory act of 1861, the following gentlemen convened at Springfield, August 6th, 1862, to conduct the examination of candidates for State Teachers' Diplomas, viz: Wm. M. Baker, A.M., of Quincy; Jeremiah D. Low, A.M., of Springfield; Alex. M. Gow, A.M., of Dixon; James H. Blodgett, A.M., of Amboy.

The session was opened at the High-School building, at 9 o'clock. Fifteen candidates presented themselves, of whom two withdrew upon being fully informed of the plan and scope of the examination and the time it would occupy. The general plan was the same followed in previous examinations, which may be briefly recapitulated. Each candidate drew a number upon a card, which number he placed upon all papers containing his answers in the written work, and by which number only he was known to the Board till the completion of the written examination, when, opening a sealed envelope prepared by each with his number upon the outside and his name inclosed, the Board ascertained names correspondent to the numbers against which record of scholarship had been kept. After the oral examination, the marking was compared and the recommendation of the Board made in accord-

ance with the result. Wednesday (August 6th) was occupied by written examinations in Geography, Written Arithmetic, History of the United States, Orthography, Algebra, and Geometry,—each one hour. Thursday (August 7th), written examinations in Mental Arithmetic and Grammar each occupied an hour; oral examinations in Reading, Geography, and Grammar, each an hour; and in Theory and Practice two hours.

The Superintendent of Public Instruction addressed the class at the close of the examination, briefly reviewing the general situation of teaching hitherto: the necessity of even the best teachers' securing separate certificates for every county in which they might wish to teach, and of securing new ones after two years had elapsed, and the efforts of the last five years to secure some professional legal recognition, so that whatever professional skill or knowledge one had gained should not be counted as lost on crossing a county-line or after a brief period; which effort had secured the passage of an act by the legislature authorizing the issue of perpetual State Certificates to those found worthy on due examination. While regretting that some who had been loud in expressing a desire for such professional recognition were uninterested, now that an opportunity was given, he was gratified by the interest shown by others, and at the prospective character and standing of a profession made up of such as had come forward at this and previous examinations. A true professional spirit would suggest higher motives than the exemption from local examination, which teachers in permanent situations under chartered systems had already reached. He urged them to labor for the good of their calling and the elevation of those among whom they taught.

Mr. Gow spoke of the use of professional journals, and made some reference to our national dangers, which called forth the enthusiastic and unanimous expression of devotion to our country's flag.

The class were dismissed, and the Board proceeded to sum up their labors, and found three ladies and nine gentlemen to have passed satisfactory examination. One had given no answers in Geometry, which had been announced among the branches for examination.

The Superintendent of Public Instruction had announced that graduates of duly-organized State Normal Schools, who satisfied the Board as to moral standing and success for required time, would not be called upon to pass examination. Under this provision the names of three ladies and two gentlemen were presented, and their credentials found sufficient.

The examination was highly satisfactory. The total number of questions submitted was less than heretofore, though the number used

scarcely differed from those actually *used* on previous occasions. No other calls upon the time of examiners or examined interfered, as heretofore, and no night session was found needful after a laborious day. The averages in every instance, with the exception already alluded to, were higher than the standard adopted for acceptance at previous examinations. Two individuals who had failed before were present to try again, and felt well paid for their perseverance, notwithstanding one expected to go at once to the armed defense of his country.

A most gratifying incident, in its personal professional relations, was the presence of a candidate who is a graduate of a leading State Normal School, and who came with the highest possible testimonials, among which were *bona fide* offers of different situations of the best rank, from parties having direct knowledge of the person's success and attainments. This individual had no occasion for a diploma as a means of securing position, and needed no examination to satisfy the Board of a right to the same, but preferred to be examined to test present familiarity with required branches, and for the professional advantages of attending the meeting. Such persons confer honor and dignity upon a profession whose diplomas they carry, rather than receive benefit from the possession of the parchment. How much more gratifying this reliance upon present worth, using certificates of others only as introductions to favorable consideration, than the reliance upon the numerously-signed testimonials on which some seeking positions in life base their claims.

The Board find no reason to distrust the interest of teachers from the small number present. Many others had promised to attend, several of whom, possibly, failed to come for insufficient reasons; but the Board are apprised that, in response to the call of the present week by the government, at least some of these have dropped the common warfare against ignorance, and seized the rifle to defend the national life. The patriotism of such absentees only adds to the guaranties of the future character and standing of the profession.

JAMES H. BLODGETT, Sec'y Board of Examiners.

REPORT OF THE BOARD OF EXAMINERS.

HON. N. BATEMAN, *Sup't. Public Instruction:*

As the result of an examination held August 6th and 7th, in this city, under the 50th section of the Act of 1861, we find the following persons qualified to receive State Diplomas, and recommend that such

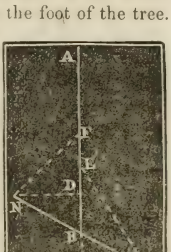
diplomas be issued to them: Messrs. W. B. Powell, Francis Hanford, Benjamin D. Slocum, Charles E. Smith, George Auerswald, Josiah P. Wood, John I. White, Andrew M. Brooks, Davis Major, and Misses Frances Bacon, Mary Cowles, and Helen A. Humiston. We also find the credentials of the following graduates of State Normal Schools satisfactory, and recommend the issue of diplomas to them, in accordance with the notice in your circular of June last: Messrs. George H. Brewer, Henry Freeman, Lucius Kingsbury, Mrs. Emily L. Briggs, Misses Fidelia L. Simpson, Amelia A. Simpson, and Frances A. Dewey.

WM. M. BAKER, Chairman,
J. D. LOW,
ALEX. M. GOW,
JAS. H. BLODGETT, Sec'y.

SPRINGFIELD, ILL., Aug. 7, 1862.

MATHEMATICAL.

SOLUTIONS.—XIV. Let AB represent the tree, and N and S the points in the plane 100 feet north and south from the foot of the tree. Through N and S pass horizontal planes, the former cutting AB in D, and the latter AB prolonged in C. In the right-angled triangles BCS and BDN we have the angles N and S=30°, and the sides BS and BN=100, to determine CS and DN. We have the proportion



Sin. 90° (comp.)	0.
: Sin. 30°	9.698970
:: BS or BN, 100	2.
: BC or BD, 50	1.698970

Sin. 90° (comp.)	0.
: Sin. 60°	9.937531
:: BS or BN, 100	2.
: CS or DN, 86.626	1.937531

In the right-angled triangle CSE, we have the base SC=86.626 and the sum of the sides SE EC=250+50=300 feet, to determine the sides SE and EC.

Put SC=86.626=c, SE+EC=300=s, and let SE=x and EC=y. Then $x+y=s$....[1], and (*B. iv, P.* 11, *Legendre*) $x^2=y^2+c^2$....[2]. From 1st Eq., $x=s-y$ and $x^2=s^2-2sy+y^2$. Subtracting, $0=s^2-2sy-c^2$, or, $2sy=s^2-c^2$; and $y=\frac{s^2-c^2}{2s}$. Substituting in this formula the values of s and c and reducing, we have $y=137.5$; deducting

from which BC=50, we have 87.5 feet from the foot when the tree falls down hill.

In the second case we have exactly the same conditions, with the exception that the sum of the sides NF FD=250—50=200 feet,=s. Substituting this value in the formula gives y=81.25, adding to which 50 feet gives 131.25 feet from the foot when the tree falls up hill.

Greenleaf's Arithmetic gives a rule (Art. 553) by which an arithmetical solution may be given, depending, of course, on the same principles as the solution above:

Since the triangles NDB and BCS have the angles N and S=30°, they are each one-half of equilateral triangles whose sides are 100 feet each. Consequently DB and BC are each equal to 50, AC=300, and AD=200 feet. $100^2-50^2=7500=(ND)^2$ or $(SC)^2$. Then (Greenleaf) $7500\div300=25$, $\frac{300+25}{2}=162\frac{1}{2}$, the distance from top when it falls down the hill; and $7500\div200=37\frac{1}{2}$, $\frac{200+37\frac{1}{2}}{2}=118\frac{3}{4}$, the distance from top when it falls up the hill.

[We have been thus elaborate in our solution of this problem because of the request of a friend at Plymouth, who sent a problem to us covering the same principles, but somewhat simpler in form, with the request that we give a solution with the 'whys and wherefores'. We are unacquainted with him, and do not know to what extent he is conversant with the higher mathematics: we trust, however, he will be able to find his 'whys and wherefores' in the solutions herewith given.—Ed.]

XX. Since the addition of a rectangle 20 rods wide would increase the area of the field 1200 rods, the length of the rectangle, and consequently of one side of the square, must be $1200\div20=60$ rods, and the width of the field 60—20=40 rods. Q. Q.

Problems.—XXII. If a man can dig 30 bushels of potatoes in one day, pick up 75 or unload 100 in the same period, how many can he dig, pick up and unload in one day? G.

XXIII. When, after 4 o'clock, will the hands of a clock contain an angle of 100°? J. W. O.

XXIV. The difference between two numbers is 7, and the difference of their squares is 231. What are the numbers? An arithmetical solution required. H.

Correspondence.—The editor has received the following criticisms on the solutions given by J. W. O. in the *Teacher* for May and August. Will J. W. O. defend his positions?

Dear Sir: Allow me to correct an error in the last number of the *Teacher*. A stick is 24 feet long. At what distance from the centre must a bar be placed to

support $\frac{2}{3}$ of it, or 16 feet? If the bar is placed at the centre, it will support the whole stick; if at the end, it will support $\frac{1}{2}$ of it, or 12 feet. As the distance of the point of support from the centre increases, so the weight upon it decreases, and *vice versa*. If the bar is placed at the centre, it supports the whole stick; if 1 foot from the centre, it supports $\frac{2}{24}\frac{3}{4}$; if 2 feet, $\frac{2}{24}\frac{2}{4}$; 3 feet, $\frac{2}{24}\frac{1}{4}$; 4 feet, $\frac{2}{24}\frac{0}{4}$; 5 feet, $\frac{1}{24}\frac{9}{4}$; 6 feet, $\frac{1}{24}\frac{8}{4}$, or $\frac{3}{4}$; 7 feet, $\frac{1}{24}\frac{7}{4}$; 8 feet, $\frac{1}{24}\frac{6}{4}$, or $\frac{2}{3}$: *so the point of support would be 8 feet from the centre, or 4 feet from the end.* By extending the point of support to the end, in the same manner, we find that it would support $\frac{1}{2}$ of the the stick, or 12 feet. If a stick is 12 feet long, the bar, to support $\frac{2}{3}$ of it, must be placed 2 feet from the end; if a stick is 30 feet long, the bar must be placed 5 feet from the end.

It is an important part of a teacher's duty to explain *principles* and show their application. How necessary it is, then, for us always to be correct. J. P. WOOD.

Query.— In the May number of the *Teacher* J. W. O. says, in his analysis of the 'Division of Fractions', that "the inversion [of the divisor] is merely for convenience". I would respectfully ask him — 1st, if a pupil in his first attempts at division of fractions would be led to conclude, from the analysis given, that the inversion (of the divisor) is merely for convenience; 2d, Does his analysis clearly show in what this 'convenience' consists? M. V. B. S.

New Mathematical Works.—

1. *Evans's School Geometry.* Primary Elements of Plane and Solid Geometry. By E. W. Evans, M.A. Published by W. B. Smith & Co., Cincinnati.

We are exceedingly gratified with the appearance of this work. It is, we think, admirably adapted to the class of students for which it was prepared — those who can not spare the time requisite for mastering the larger works. The whole subject of Plane Geometry is included in two books, making about sixty pages. To do this, many propositions have been omitted, many occur as corollaries, and most have been presented in a considerably-modified form. Solid Geometry covers some twenty pages, and is treated in a similar manner. We find the demonstrations throughout unusually simple, yet direct and conclusive.

2. *Ray's Test Examples.*

What teacher who has been obliged to keep upon his table a dozen or two different arithmetics, from which to obtain test examples after those of the text-book were exhausted, will not thank the author of this admirable little book for relieving him of so much unnecessary labor? There are over three thousand problems, covering all the principles of arithmetic; and, while we have seen no problem too difficult for pupils using our common school-arithmetics to solve, yet they are exceedingly well calculated to test not only the thoroughness of the pupil, but his ability to use his thinking-powers. It is just the book we have long needed.

3. *Robinson's New University Algebra.* 420 pages. New York: Ivison, Phinney & Co. Chicago: S. C. Griggs & Co. 1862. Price $1.50.

We do not often find so good a book as the old University Algebra so much improved by revision as this has been. *Rewritten*, however, is the better word, for the two editions have scarcely any thing in common. Sixty pages of original matter have been added, some of the methods of investigation are essentially different, and several articles which in the old edition appeared as an appendix have

been elaborated and incorporated into the body of the work. Not the least improvement is the change in the arrangement of the page, and in the type, by which the appearance of the bok is rendered far more attractive.

The publishers offer special inducements to persons wishing to examine the book; and we are sure no one will regret having done it.

4. *Robinson's Progressive Table-Book.* 72 pages. 12 cents. S. C. Griggs & Co.

Another addition to our rapidly-increasing list of text-books based on the object method. Brimful of pictures — pretty ones, too,— and the examples interesting as well as instructive, we should like to see a child who would not be pleased with it. The lessons are simple, progressive, and comprehensive.

SAY WHAT YOU MEAN.—Dr. Nicholas Murray (Kirwan) pursued his collegiate course at Williamstown, during the presidency of that acute and accomplished critic, Rev. Dr. Griffin. In his fourth year he was brought into more immediate contact with the venerable President, whose duty it was to examine and criticise the written exercises of the graduating class. Dr. Murray when a young man, and even down to the day of his last illness, wrote a free, round and beautiful hand, and the exercise which was at this time to undergo the scrutiny of his venerated preceptor had been prepared with uncommon neatness and accuracy. Dr. Griffin was accustomed to use a quill-pen with a *very broad nib.* Introduced into his august presence, young Murray, with a becoming diffidence, presented his elegantly-written piece for the ordeal. The discerning eye of the President passed quickly over the first sentence, and with a benignant look he turned to his pupil, and said, in his peculiar way, "*Murray, what do you mean by this first sentence?*" Murray answered, blushingly, "I mean so and so, sir." "Then *say so*, Murray."—and at the same time drew his heavy pen through line after line, striking out about one-third of it. Having carefully read the next sentence, the inexorable critic again inquired "*Murray, what do you mean by this?*" "Doctor, I mean so and so." "Please just *say so.*"—striking out again about one-half of the beautifully-written page. In this way, with his broad nib (which made no mean mark), he proceeded to deface the nice clean paper of the young collegian, so that at the close of the exercise the erasures nearly equaled all that remained of the carefully-prepared manuscript.

This trying scene was not lost upon Murray. He considered it one of the most important events of his college course. It taught him to think and write concisely; and when he had any thing to say to SAY IT, in a simple, direct and intelligent manner. Indeed, much that distinguished him as one of our most vigorous and pointed writers may be attributed to that early lesson—"SAY SO, Murray."

Correspondence of the N. Y. Observer.

OFFICIAL DEPARTMENT.

OFFICE OF PUBLIC INSTRUCTION,
Springfield, Ill., September, 1862.

RESIDENCE.

THE question of residence has been briefly considered in former circulars. It is here proposed to examine it more in detail. It is important, because it is vitally related to the right of voting, of holding office, of admission to school, and to the proper enumeration of the children in the several districts.

Residence, or domicil, is a "fixed and permanent abode or dwelling-place for the time being, as distinguished from a mere temporary locality of existence."

To acquire a domicil two things are essential: there must be the fact of residence in a particular place, and the intention — the voluntary purpose — to make that place a permanent abode.

To retain a domicil when acquired actual residence is not indispensable. It is retained by the absence of intention to remove. Nor does the intention to remove change the domicil unless carried into effect. The intention and the act must go together. A residence once gained remains till a new one is legally acquired. The theory of the law is that every one must have a residence some where, and that no one can have more than one domicil at one and the same time.

Where a man divides his time between his place of business and his dwelling-house, the place of the latter determines his domicil. If he owns more than one dwelling-house, the one in which he sleeps is his legal residence. If the dwelling-house is partly in one district and partly in another, the occupant must be deemed a resident of the district in which he usually sleeps, if that can be determined.

The question of domicil has been largely discussed in the courts, and is one of no small difficulty. Cases may arise to which no rule of the legislature or the court will exactly apply.

The commonly-accepted legal maxims concerning domicil, condensed by Hon. V. M. Rice, of New York, from Judge Story's 'Conflict of Laws', chap. 3, are as follows. The statement is more comprehensive than is required by the scope and purpose of these notes; but, as it forms the basis of the remarks to follow, and embodies much useful information not often found in so brief a compass, it is given in full:

1. The place of birth of a person is considered as his domicil, if it be at the time the domicil of his parents. This is called the domicil of nativity. But if his parents are on a visit or on a journey, the home of the parents will be deemed his domicil.

2. The domicil of birth continues until he has acquired a new domicil.

3. A minor is generally deemed incapable of changing his domicil; but if the parent changes his domicil, that of the minor follows it. If the father dies, his last domicil continues that of his minor children. This rule is subject to qualification if the minor has been emancipated from parental control, or adopted into a new family.

4. A married woman follows the domicil of her husband.

5. A widow retains the domicil of her deceased husband until she acquires another.

6. Prima facie, the place where a person lives is deemed his domicil.

7. Every person of full age having a right to change his domicil, if he removes to another place with an intention of making it his permanent residence, that immediately becomes his domicil.

8. If a person removes to another place with an intention of remaining there for an indefinite time, and as a present domicil, it becomes his domicil, notwithstanding he may entertain a floating intention to return at some future period.

9. The place where a married man's family resides is generally deemed his domicil, but not if it be a merely temporary establishment.

10. If a married man has his family in one place and his business in another, the former is deemed his domicil.

11. If a married man has two places of residence at different times of the year, that will be esteemed his domicil which he himself selects or deems his home, or which appears to be the centre of his affairs, or where he votes or exercises the rights and duties of a citizen.

12. If a man is unmarried, that is generally deemed his domicil where he transacts his business, exercises his profession, or assumes the duties or privileges of a citizen. But this rule is subject to qualification.

13. Residence, to produce a change of domicil, must be voluntary, not by imprisonment, etc.

14. Mere intention to remove, without the fact of removal, will not change the domicil; nor will the fact of removal without intention. They must go together.

15. A domicil, once acquired, remains until a new one is acquired.

It remains briefly to apply these principles, for the practical guidance of school-directors and others concerned.

(1.) None but legal residents of a district are entitled to free instruction in the public school of said district.

(2.) As a general rule, the residence of the parents is the residence of their children.

(3.) Boarding children in a different district from that in which the parents reside does not, of itself, entitle them to the benefits of the free school in said district.

(4.) The mere temporary residence of a family in a district, in order solely to enjoy the benefits of the free schools, and with the intention of removal as soon as that purpose is accomplished, does not entitle the children to the privileges of said schools.

(5.) The removal of a portion of a family from the legal domicil to another district, in order to send to the free schools thereof, does not confer the right to do so.

(6.) As a general rule, the residence of their parents is the residence of employés: hence the privilege of the free school in another district is not acquired by placing children temporarily at service in that district, with the sole object of sending them to school. This includes those who are placed in families to attend school and do chore-work for their board, etc. The most liberal policy is, however, recommended toward this class of children. The state has as much interest in their education as in that of the more favored; and, although not legally eligible to attend free, the directors should permit them to do so, when not inconsistent with the rights of others and the welfare of the school.

(7.) Children who have been apprenticed, or adopted into a new family; or who have been placed permanently in the care of others, with no intention of withdrawal; or those over whom parents have relinquished all control from whatever cause; or those who have no parents or guardians, or whose parents or guardians live in another state or country and exercise no control over their children; or those who have no permanent abode, but go from place to place in search of employment, and whose only home is where they find work; — the children included in all the above classes are to be enumerated in the district where they live, and are entitled to all the rights and benefits of the free schools in said district.

(8.) If a school-director leaves his district to remain an indefinite time, and with no settled purpose of returning, he loses his residence, and with it his office; and an election should be ordered to fill the vacancy.

Other applications of the rules quoted from Judge Story can readily be made by parties concerned, as exigencies arise. I have received

important aid in the discussion of this question from the digest of decisions published by the State of New York, already referred to.

It is a solemn hour in our dear country's history. The stillness of the waning summer is every where broken by martial music and the hurrying tread of armed men. Our duty as educational men, as officers, teachers, and friends of common schools, in this eventful crisis, is plain. If a sense of duty impels us to volunteer, or if the government summons us by name to defend her insulted flag and share the perils of the battle-field, we must not shrink. The call of true patriotism is the voice of God. Let us hear and respond to its impressive appeal. It is noble to rally unbidden to the standard of the Republic. It is no dishonor to abide the issue of a draft. Thousands of conscientious loyal men, who are perplexed as to the question of personal duty, will be relieved and satisfied when the government itself, through the forms of a draft, shall have decided the question for them.

The maintenance of our system of free schools is a duty on no account to be neglected: the education of our youth is a prime necessity of our political system. But the stern demands of this hour of peril subordinate all other interests, till the storm is past, to the one great absorbing duty of rescuing the government itself, the benignant earthly source of all our blessings, from the jaws of impending ruin. If the government is overthrown, if the central sun is blotted from the political firmament, the equilibrium of the attractive and divergent forces of the entire system is at once destroyed: states fly from their orbits, anarchy ensues, chaos reigns, business is annihilated, wealth vanishes; and all our schools, and all the beauty and glory of our institutions, and all the lustre of the heroic past, and all the hopes of the opening future, all that we have anticipated as the heritage of our children, all that we have prophesied as the majestic destiny of our country,—all, all, is whelmed in one common and irretrievable ruin.

Let us, then, do our part to swell the hosts of the Union. "Our brethren are already in the field." Hundreds of teachers and pupils from the schools of Illinois are still side by side on the tented field. Side by side, too, in the honored soldier's grave, some "sleep their last sleep". "Never", said one of our pupil-soldiers, "did I understand the divine pathos of those classic words,

"'Dulce, dulce et decorum est pro patria mori',

"till I saw my brave teacher die, pierced by the bullets of traitors."

To those who remain, teachers and school-officers, I would say, work with renewed ardor; relax not your efforts; do your utmost to sustain the schools; strengthen the things that remain; teach with new zeal and faithfulness; visit the schools with fresh interest; labor with redoubled activity; collect statistics and prepare for the most perfect reports ever transmitted to this office. And, brethren, be of good courage: I do not think God wills to let this nation die.

NEWTON BATEMAN, Sup't Public Instruction.

EDITOR'S TABLE.

EDITOR'S CHAIR.

To Correspondents and Exchanges.— The Senior Editor, A. M. Gow, has been chosen to take charge of the schools of the city of Rock Island, commencing the first of September. Our friends will please take notice, and send our correspondence and exchanges to that place, in stead of Dixon, as formerly.

The State Superintendency of Education.— The time is not far distant when it will be necessary for the people to make a selection of the individual to whom to confide the educational interests of this great state. What manner of man shall he be to whom is committed so responsible a trust? Who is fit for such high and mighty cares? Scarcely an officer in the state has resting upon him such responsibility as the man who stands at the head of her educational system — whose direction affects the thousands of her children, making them useful to themselves, honorable to their parents, and a shield and protection to the state. Who are soon to take the places of our thousands of patriotic, liberty-loving citizens who have taken their lives in their hands and gone to their country's defense in this her time of peril? The children. What will the characters of those children be? Just what we make them. Shall we make them like their fathers and brothers who have gone out to battle? The answer of every noble heart will be, The children are the glory of the state, and, whatever sufferings we must endure, we must not neglect them. They must not only be fed and clothed, they must be educated. The want of popular education in one-half our country has deluged the whole land with blood and tears.

The spirit of the educational system demands that its officers should be men who have devoted their lives to its promotion. No professional man can enter into the spirit of our educational system if his tastes and education have not fitted him specially for it. It is due the people, the teachers, and the children of the

state, that a professional teacher be placed at the head of the Department of Public Instruction. To conduct the affairs of that department requires wisdom, skill, and honesty, faithfulness, and energy of purpose.

The department for the last four years has been conducted in such a manner as to win respect at home and eulogy from abroad. The Superintendent of no state stands higher as a man or an officer than the Superintendent of Illinois. A finely-educated man, he knows the value of a cultivated mind. An accomplished and successful teacher, he understands the wants of the profession and its relation to the people at large. A successful officer, he has done much to make the influence of the department felt in every part of the state, by the wisdom of his decisions, the prudence of his counsels, and the correctness of his judgment. He has infused the energy and spirit of real life into many sections where apathy and indifference dwelt before. He has made himself so well acquainted with the spirit of his office, in all its details, that the state can ill afford to lose his services in that capacity, especially at this critical juncture in our affairs. We need old heads and tried hands at the helm. There must be no experimenting now: what we have we at least must make secure: we must not go backward.

We do hope our people will rise far above party issues or political schemes, and reëlect Mr. Bateman to the office he has filled with such distinguished success. The welfare of the system demands permanency in this office; and, as we have a first-class man, why make a change? We hope the interest of the cause of education will be esteemed paramount to every other consideration, and that Newton Bateman will be retained, as a just tribute to his efficiency as an officer and his worth as a man.

Will the friends of education who are opposed to mixing education and politics, and in favor of the right man in the right place, please circulate?

A Good Work for Teachers.— We are marshaling a million-and-a-quarter of men for the battle-field. These men have mostly been used to living well at home, and when sick to having tender care. A soldier's life is a life of privations, danger, and suffering. Many, very many, will fall on the battle-field, many more waste in loathsome hospitals. The army regulations do not provide the delicacies or even many of the common comforts of the sick-room. These our brave brothers ought to have. We commend it, then, to teachers to take hold of this work. Organize Soldiers'-Aid Societies; get all the neighborhood interested; let the children as well as the parents do something, give something, for the cause. Give and work yourself. No holier work can be set before willing hands and living, sympathizing hearts.

The articles most needed now are thin shirts and drawers, for the hospital, dried, preserved and canned fruits in great quantities and of all kinds, jellies, wines and cordials of good age, farina, tapioca, corn-starch; also slippers, socks, pillow-slips, shirts, and bed-sacks. No more bandages, lint, and the like, is needed. Money is wanted most of all, for it is the ready representative of all. Gather and send forward to Chicago, Cairo, or St. Louis, all you can.

Prof. W. D. Henkle has received the nomination of the Union Convention for State School Commissioner of Ohio.

State Teachers' Diploma.— On another page will be found the result of the examination held in Springfield for the honor of the professional diploma. There were thirteen applicants before the Board — an unusually good class,— only one of whom failed. Among those who were successful in obtaining the coveted honor we noticed one who had failed on a previous occasion. We admire pluck, and have no doubt that the individual manifesting such determination will hold a still higher place among his professional brethren than even his diploma entitles him to. There were not more than half as many present as had signified their intention to come; but the recent war-news, and in several cases private business, prevented some from attending. The examination passed off smoothly and pleasantly.

Several diplomas were granted, by courtesy, to the Alumni of several of the State Normal Schools of other states. It is thus shown that Illinois recognizes the brotherhood, and extends them the right hand of fellowship.

The Battle of the Cache — Col. Hovey.— We learn with pleasure of the success of our friend Col. C. E. Hovey, former Editor of the *Teacher*, in maintaining his command against the attack of vastly superior numbers, while on their recent march through Arkansas to Helena. The command of Col. Hovey numbered about 400 men, which at the close of the fight was increased by 200 more, and was opposed to about 2000 Texas Rangers, who were finally driven from the field with an ascertained loss of 110 found on the field, besides many wounded. The Colonel's loss was 7 killed and 57 wounded. Col. Hovey received a spent ball in the breast, though the wound was so slight that no mention of it is made in his report.

Among those commended for special services is Capt. L. H. Potter, formerly a professor in the Normal University, who was wounded severely in the leg. Capt Potter carries the ball with him, and we understand is soon to go East to have it extracted. We wish Bro. Potter a successful journey and a speedy return to duty.

'Paraffine' and 'Parafine'.— *Mr. Editor:* The word 'paraffine' is found in Webster's Dictionary. The word as I find it on the candle-boxes uniformly has but one *f*; and this circumstance led me to propose the question. If you will examine the manuscript, you will find that I wrote it with but one *f*. PUPILLUS.

Explanation and Reply.— The manuscript referred to having been destroyed, we can not verify 'Pupillus's' statement as he suggests, but do not question his correctness. We make it a rule to correct the misspelled words in all manuscript or other matter that passes through our hands for publication, except in cases where it would be apparent to the ordinary reader that the misspelling is intentional. This case not coming within the exception, we changed the spelling without even being conscious that we did so.

Since the above note was received, we have investigated the subject as thoroughly as its importance seemed to to demand, and find that the word as given by 'Pupillus' can be traced pretty clearly to the hand (brain evidently had little or nothing to do with it) of some illiterate stencil-cutter. His name can doubtless be ascertained by applying to the manufacturer of the candles. N.

LOCAL INTELLIGENCE.

CHICAGO.— At the Examination for admission to the High School, July 3d, 273 candidates presented themselves. The questions were not particularly difficult, but were eminently calculated to show whether the pupils had been taught to think for themselves, and were, we think, a remarkably fair set of questions.

The Board, at its meeting July 12th, fixed the number to be admitted at 151, which admitted all who stood 66 per cent. or above. Last year the per cent. required was 56, and the number admitted 160 out of 217 candidates; showing, the questions being fully as difficult, a much better grade of scholarship this year than last. The constantly-increasing number of candidates shows the estimation in which the people hold the High School, and can not fail to elevate the standing of the school by giving it a higher grade of scholars.

Of the 151 admitted, the Dearborn School (Broomell) had 21; Jones (Woodard), 27; Scammon (Wentworth), 9; Kinzie (Slocum), 7; Franklin (Lane), 3; Washington (Cutter), 7; Moseley (Briggs), 11; Brown (White), 16; Foster (Spofford), 6; Ogden (Heywood), 13; Newberry (Meserve), 4; No. 12 (Aiken), 2; Skinner (Merriman), 25: Total, 151.

The Annual Examination of the High School occurred on Monday and Tuesday, July 7th and 8th, and was very satisfactory in its character.

The Anniversary Exercises were held in Bryan Hall, Friday afternoon, July 11. The hall was crowded to overflowing, and the only drawback was the difficulty of hearing. Several of the finest pieces were lost to at least one-half the audience from this cause.

The graduating class numbered 48: 7 from the Classical, 27 from the General, and 14 from the Normal Department.

Fred. W. Dodge (average for the year 99.2) received the life membership in the Young Men's Association, and the life scholarship in Bryant & Stratton's Commercial College: the other Bryant-&-Stratton scholarship was awarded to L. Georgiana Loomis (average 98.9), of the Normal Department.

The closing exercises of the Grammar Schools took place Friday morning. The programmes were full, and the exercises generally were very interesting. At their close the Foster medals and Bryant-&-Stratton scholarships were awarded.

The festivities of the week closed on Friday evening with one of the most brilliant festivals ever given in the city. Bryan Hall was filled with a most brilliant gathering. An elegant supper was served at 10 o'clock, after which dancing commenced and was continued far into the small hours. B.

MARRIED, in Beloit, July 5th, by Rev. H. N. Brinsmade, Mr. WILLIAM T. BAKER, of Chicago, and Miss ELIZA ANNIE, daughter of S. Dunster, Esq., of Attleboro, Ms.

By this deplorable calamity Chicago loses one of her most energetic and successful teachers, and we our first assistant. We part from her regretfully, for we fear she will find the *primary* far different from the *grammar* grades, in which she has done so well. We temper our anguish, however, with the thought that when the summons came she, too, was not only ready, but glad to go. B.

Bradford Y. Averell, formerly Principal of the Moseley School, and for the last three years Professor of Rhetoric and English Literature in the High School, Chicago, has resigned his situation and left the profession. He designs spending a few months at Andover, after which he will enter the Ministry.

We shall all miss Mr. Averell much. We can not, however, regret the choice he has made, for we know that those qualities which made him so successful as a teacher and so agreeable as a companion are eminently calculated to give him a high position in his new vocation.

God grant him the success he so richly deserves. B.

Mt. Carroll Seminary.— This institution is located at Mt. Carroll, Carroll Co., Illinois, and is presided over by Mrs. Frances A. Wood Shimer and Miss Cindarella M. Gregory, assisted by eight gentleman and lady instructors. The year is divided into three sessions, and the programme embraces an extended list of studies. The entire course extends over five years — three in the Academic and two in the Collegiate course.

In order to extend the advantages of education to those who lack the means, arrangements are made to enable worthy persons to assist themselves in securing an academic course. Young men preparing for the University, or persons desirous of acquiring a knowledge of the science of teaching, are offered special facilities for the purpose. The Normal or Teachers' department is expressly designed to fit young gentlemen and ladies for the important work of imparting instruction. A fine cabinet of mineralogical and geological specimens has been established, and in addition a collection of over two hundred mounted birds has been made, thus adding special interest to the department of Natural Science. A printing-office is in connection with the institution, from which is issued the *Seminary Bell.* A reduction of terms is made to the daughters of missionaries, of deceased clergymen, and of clergymen engaged in the work of preaching.

Those who are desirous of sending sons or daughters to school would do well to send for a catalogue.

For the War! — To the friends who have requested the assistance of Mr. Jas. H. Blodgett at teachers' institutes this fall, we are directed to say that he has volunteered in another service of his country, that of her defense. When he returns, as we hope he may soon, our troubles being brought to a happy termination, he will again enlist to fight against ignorance and crime, taking his place in the teachers' ranks.

Lightning.— From the *Aledo Weekly Record* we gather that, on the 4th ultimo, while the citizens of the Cooper District, Mercer county, were assembled for a school-meeting, a thunder-bolt descended the chimney, knocking the stove-pipe and stove in all directions and extinguishing the lights, but without injuring any one of the many around the stove. It was a providential deliverance.

A short time since a fine new school-house in Lee county was struck by lightning during the night. The course of the fiery element was such that, had the teacher and pupils been present, there would, in all probability, have been a fearful destruction of life. The house was seriously injured.

The profit to be derived from the above is, that every school-house, particularly in this prairie state, should be protected by a lightning-conductor. No building should be without such a protection, and particularly a school-house. Will directors and parents see that the school-house is safe at once?

A Merited Tribute Fitly Rendered.— The friends of education in Illinois have probably observed before this that the University of Chicago, at a recent commencement, conferred the honorary degree of LL.D. upon John Russell. Many of our readers are doubtless acquainted with the venerable old man. Such will hear this announcement with sincere pleasure; for, while a ripe scholarship commanded respect, manly virtues gained fast friends. Having lived a quiet life on a farm in Greene county, Dr. Russell has passed into the sere and yellow leaf without becoming widely known. Few men of equal erudition are as little mentioned in public; and indeed it is not generally known in our own state that in the little village of Bluffdale we possess one who, as author, linguist, and philosopher, would be an ornament even in a higher civilization than ours. It is greatly to the credit of the University of Chicago that the first recipient of its honorary degree should be one so well worthy of wearing it. John Russell is now a venerable old man. He has spent almost all his days in Illinois. He has been a student from his youth up, and might with propriety be named as one of the pioneers of Western literature. Of the most spotless character, of the rarest social virtues, genial and sunny-hearted even in hours of pain, he is one whom friends count it a pride and a pleasure to know. He is the patriarch of his little village, where he has been postmaster since the time of John Quincy Adams, and whence his own sons and the sons of his friends have gone out, with his words to cheer and encourage them, to fight the battle of liberty. Let us hope that every future candidate of the University of Chicago will as well deserve the three mystic letters as John Russell, LL.D.

Ill. Cor. Missouri Democrat.

J. H. Knapp.— We gather from the Knox county papers — the Galesburg *Free Democrat* and the *Knox Republican* — that School Commissioner J. H. Knapp is busy in the duties of his office. Mr. Knapp makes extended minutes of his visitations for publication, that the people may see the condition of the schools and know their efficiency. It would be a grand movement if all the commissioners in the state would take the means offered by the local press to disseminate such information. Keep the schools before the people, and then they will do their work. The people need to be educated up to the necessities of school improvement as well as the teachers, as there can not be an entirely good school without *a good teacher and an intelligent coöperating public to assist him.*

Illinois College.— From a circular recently issued by the trustees of this institution, located at Jacksonville, we take the following extract: "For more than thirty years, without interruption, it has prosecuted the purposes for which it was founded. As the oldest college in the state, it is, perhaps, more widely known than most western institutions. Governors, judges, legislators, attorneys, physicians, ministers of the gospel, and business men in the various pursuits of commerce and the mechanic arts, are already numbered among its graduates. Amidst all the excitement of the Great Rebellion, which has summoned many of its stu-

dents to the defense of our free institutions, the college has preserved its organization unbroken; and it will enter upon its thirty-third year with undiminished resources and facilities."

Besides the regular college course, this institution offers to those young men who prefer it the advantages of a Scientific department, embracing all the studies of the regular course except the Latin and Greek languages. A Preparatory department is conducted under the supervision and instruction of members of the college faculty. Tuition and all incidental expenses, in the Classical or Scientific department, $36.00 a year; in the Preparatory department, $25.00. Board, including furnished room, costs from $2.25 to $2.50 per week. The next college year begins on Thursday, the 11th of September. President Sturtevant, who has been connected with the institution from its foundation, is still at the head of the faculty.

No State Fair This Year.— The Executive Committee of the Illinois State Agricultural Society met at Peoria, August 19th, and after consultation decided that it was not practicable to hold a fair this fall.

Personal Items.— We are glad to learn that our friend Mr. M. V. B. Shattuck has been appointed Principal of the Moline Union School for the ensuing year.

Mr. Josiah T. Read, formerly of Lee Centre, Lee county, will take charge of the Centre Ward School of Sterling, Whiteside Co. We wish Bro. Read success.

Mr. James Gow, formerly of Dixon, removes with his brother to Rock Island, and will take charge of the High School in the latter city.

NOTICES OF BOOKS, ETC.

Allen's Primary Geography. *Second Edition.* Philadelphia: J. B. Lippincott & Co. 1862.

There can be no stronger proof that the principles upon which this little book is based are correct than that scarcely three months from its publication the first edition is exhausted and a second is issued. We are glad to see that the author, appreciating the difficulty of introducing methods so essentially different from the accustomed ones into our school-rooms, and the difficulty teachers find in adapting themselves to changes so radical, has enlarged and extended his suggestions to teachers, and also presented several features not contained in the first. Every lesson is taken up, and materials furnished the teacher to aid him in conducting his recitations. We believe now nothing is lacking to render it complete. It has been very generally adopted in Wisconsin, and we should be glad to hear of as good success in our own state. B.

The New Gymnastics, for Men, Women, and Children. By Dio Lewis, M.D., Proprietor of the Essex-street Gymnasium, Boston. With 300 Illustrations. Boston: Ticknor & Fields. 1862. 274 pages. Price $1.00.

We have been exceedingly interested in the perusal of this book, though we have seen it nearly all in some of the educational journals of the day. The au-

thor is a great enthusiast in his specialty, and has a faculty of inspiring those who come under his influence with a large portion of his feeling on the subject. Physical development, or improvement in health, strength, and vigor, is a most important consideration in the education of children; and the system here illustrated is admirably calculated to promote these ends. A judicious training of bone and muscle will make us a healthier, happier people; and we know not how this training can be imparted unless it can be in the schools — particularly those of our cities, where the children are deprived, in a great degree, of the means of health so richly enjoyed by their country cousins.

Every teacher should have the boook. Sent by the publishers, postpaid, for $1.

Intellectual Aririthmetic. Being an Analysis of the Science of Numbers, with special reference to Mental Training and Development. By Charles Davies, LL.D., Author of a Full Course of Mathematics. New York: A. S. Barnes & Burr. 178 pp.

We see that Prof. Davies has issued a new series of Arithmetics throughout. From the high reputation of the author, we presume these books will have a widely-extended distribution. The work in hand presents a neat appearance, both in type and binding.

Quackenbos's English Grammar.

A copy of this book is upon our table, but was received at too late a day for us to give it such examination as we desire to before passing our judgment upon its merits, in season for this number of the *Teacher*. It will receive attention next month. Meantime our readers will find in the annexed advertising sheet what the publishers say of the book.

English Analysis. Containing forms for the Complete Analysis of English Composition; together with Selections for Analysis from the best English Authors. Designed to accompany the Study of English Grammar in High and Grammar Schools. By Edward P. Bates, A.M., Principal of Cotting Academy, West-Cambridge, Mass. Boston: Crosby & Nichols. 107 pages.

Chambers's Information for the Peopee. An entirely new and improved edition. Edited by William and Robert Chambers. Philadelphia: J. B. Lippincott & Co. Royal 8vo.; 2 vols.— pp. 824, 826. Cloth $2.25, library style $2.50, half-morocco $3.00, per volume. Sold in Chicago by S. C. Griggs & Co.

Every teacher in the state ought to have a copy of these books in his library. He can not afford, especially in these days of object-teaching, to be without them. In them he will find subject-matter in inexhaustible variety for many an hour's amusement and instruction for his little flock, and perhaps for himself. Highly-educated themselves, and enjoying an enviable reputation in the world of letters on both sides of the Atlantic, William and Robert Chambers have done more than any persons now living, by the publication of such works as these, to elevate the common people of Great Britain. Designed especially for them, though adapted to all classes, this work comprises all those subjects on which information is of the most importance: such as the more interesting branches of science — physical, mathematical, and moral,— natural history, political history, geography, and literature. Every thing is given that is requisite for a well-informed man in the less highly educated classes of society, and nothing omitted pertaining to intel-

lectual cultivation, excepting subjects of professional or local interest. The ruling object of the work has been to afford the means of self-education, and to introduce into the mind thus liberated and expanded a craving after still further advancement.

To give our readers who may be unacquainted with these works a still better idea of them, we subjoin a list of the subjects treated of in the first volume. These subjects cover in all sixteen royal-octavo pages, and in some cases thirty-two. The second volume is equally valuable.

Astronomy; Geology; Meteorology; Physical Geography; Vegetable Physiology; Systematic Botany (32 pages): Animal Physiology — the Human Body; Zoology (64 pages); Natural Philosophy; Mechanics — Machinery; Hydrostatics — Hydraulics — Pneumatics; Optics — Acoustics; Electricity — Galvanism — Magnetism — Electro-Magnetism; Chronology — Horology; Chemistry; Chemistry applied to the Arts; Fictile Manufactures; Textile Manufactures; Mining — Minerals; Metals — Metallurgy; The Steam-Engine; Civil Engineering; Inland Conveyance; Maritime Conveyance; Architecture; Warming — Ventilation — Lighting; Supply of Water — Baths—Drainage; Agriculture—Culture of Waste Lands — Husbandry (32 pages); The Kitchen-Garden; The Flower-Garden; The Fruit-Garden; Arboriculture; The Horse; Cattle — Dairy Husbandry; The Sheep — Goat — Alpaca; Pigs — Rabbits; Poultry — Cage-Birds; The Honey-Bee; The Dog — Field-Sports; Angling; Fisheries; Preservation of Health; Food; Beverages; Preparation of Food—Cookery; Medicine—Surgery; Clothing—Costume; Index; Glossary of Terms; and Titles.

S. C. Griggs & Co. will send these volumes to any address, on receipt of price.

B.

THE LEADING PERIODICALS.

Harper for August leads off with an illustrated article entitled 'A Flying Trip through Norway', followed by 'Along the Wharves', an amusing description of those classic localities in Gotham. The other articles are —'Tomattoo'; an excellent biographical sketch of 'John P. Kennedy'; 'Orley Farm', drawing toward its close; 'Marginalia', being an entertaining collection of notes copied from the books in the library of John Adams, second President, all in his own hand-writing and some written after he had arrived at a very great age; a couple of chapters, only, of 'Mistress and Maid', by Miss Mulock, to make room for several chapters of 'Romola', the new novel by Miss Evans, the talented author of *Adam Bede, Beulah, The Mill on the Floss*, etc.; a good account of the 'South-Carolina Nullification'; a racy paper on 'Charles Dickens', written, we suppose, by his friend L. Gaylord Clark; 'Philip', by Thackeray; and the 'Record of Current Events', 'Easy Chair', and 'Editor's Drawer'.

The Atlantic for September was published nearly a week earlier than usual, having come to hand on the 17th of August. Its table of contents embraces the first part of a new story entitled 'David Gaunt', by the authoress of *Life in the Iron-Mills*, which one would recognize as hers without being told; 'Cerebral Dynamics', by Dr. Ray, of Providence, whose experience in the Butler Insane-Asylum certainly qualifies him to speak understandingly on this subject; 'A New Sculptor', a pretty little poem by Mrs. Julia Ward Howe; 'Plays and Play-Acting',

which might have been written by Mr. Richard Grant White, though it is hardly his style; 'Off Shore'; the second installment of 'Life in the Open Air', crisp and fresh, by Maj. Winthrop; 'Rifle Clubs', by H. W. S. Cleveland: 'Two Summers', by a new contributor, Mrs. Elizabeth Akers; the second part of 'Mr. Axtell', in which the story does n't get on much, though the interest is quite well sustained — we should like to know what is meant by an *evergreen voice;* a highly-interesting chapter on the 'Development of Radiates', by Prof. Agassiz; 'Gabriel's Defeat', the story of a big scare in Virginia as long ago as 1800, and a very interesting and instructive article on 'The Life of Birds', both by T. W. Higginson; 'Bethel', by A. J. H. Duganne,— good, but it seems strange to see Mr. Duganne in the *Atlantic;* 'The Horrors of San Domingo', by John Weiss,— not very brilliant, nor, as we hear, always reliable; 'A Complaint of Friends', by the author of *My Garden*,— Fanny-Fernish in style; an able political article entitled 'The New Opposition Party'; and the 'Reviews and Literary Notices'.

The Continental has steadily gained in public favor since its commencement, and now stands firmly established. Wide-awake, and in the front ranks on the political questions of the hour, it commands the attention of a largely-extended circle of readers. The number for August was particularly good. The contents were — 'Among the Pines', being the closing chapters of that extraordinarily-successful story; a sharp little poem, 'Southern Rights'; 'Maccaroni and Canvas'; 'The Senate Gallery', being notes on Breckinridge, Crittenden, Andrew Johnson, Green, Seward, Hamlin, Fessenden, and Wade; 'The Last Ditch', a caustic parody on *The Germans' Fatherland;* 'Rewarding the Army'; 'John McDonogh, the Millionaire'; 'Helter-Skelter Papers'; 'Sketches of the Orient'; 'Witches, Elves, and Goblins'; 'A True Romance'; 'The Huguenots of New-York City', a short and very interesting sketch; 'The Bane of our Country', being the aristocracy based on property; 'The Molly O'Molly Papers'; 'Wounded', a beautiful and touching poem; 'Astor and the Capitalists of New York'; Mr. Kimball's oddly-entitled 'Was he Successful?'; the opening chapters of 'A Merchant's Story', by Edmund Kirke, which read well; 'Corn is King'; and the 'Literary Notices' and 'Editor's Table'.

The New-York Independent, which is one of the ablest journals that come to our table, published, not long since, an extended notice of the different educational agencies of the country, which has been extensively copied and read. Speaking of the different educational monthlies, it says "They constitute a distinct class of periodicals, and have attracted far less attention and patronage than their merits would justify." Let us add a fact corroborative of this statement: The *Atlantic Monthly* for August contained an article entitled 'The New Gymnastics', which has, it is said, excited more general interest than any other article the magazine has recently contained. A series of articles more elaborate than this — almost identical, in fact, with that portion of Dr. Lewis's new book originating with himself, which latter is said to be a complete exposition of the system of which that article was a synopsis — has appeared in several of the different state educational journals during the last year-and-a-half, which have done much service to the few thousand teachers whom they have reached; but outside this narrow circle who has heard of them?

B.

☞ The Senior Editor of the 'Teacher' has removed to Rock Island, Illinois, and requests that hereafter his Correspondence and Exchanges be addressed to that place, in stead of Dixon as formerly. ALEX. M. GOW.

ILLINOIS TEACHER.

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TRUE *VERSUS* FALSE DIGNITY.

I ONCE heard a teacher, living not a thousand miles from the State of Illinois, and of no inconsiderable reputation in his own locality for his success in the profession, talk somewhat in this strain:

"I know that teaching is honorable, and all that kind of thing, and that no occupation can be more noble and useful than this; yet I have always been ashamed to acknowledge among strangers that I was a teacher. When away from home I have been careful to conceal my occupation, and have studiously avoided saying or doing any thing that would show my cloth.

"To illustrate the extent to which I carried this feeling, I will relate an incident. On returning once from a visit to the East, during a summer vacation, I came by the way of the Ohio river. The water, as is usual at that season, was low, and the voyage tedious; and the passengers had ample time and opportunities to study each others' characters and form new and pleasant acquaintances. For myself, I became quite intimate with a gentleman of agreeable manners and fine social qualities. One day, while we were engaged in conversation, he suddenly interrupted the current of discourse, and, looking me steadily in the face, said 'Mr. ——, I profess to be something of a physiognomist. I have been studying your character, and I think I can tell your occupation. Will you permit me to guess your business?' 'Yes: go on.' said I. 'You are an actor.' said he. 'Right.' said I. My companion, somewhat elated at his success, proceeded—'Now I

think I can tell the precise part you take in the profession.' 'Go on.' said I. 'Your part is Tragedy.' said he. 'Hit it again.' said I. After a few more words the subject was dropped; but the circumstance fully illustrates my antipathy to being known as a teacher. I always had a feeling of degradation in the company of strangers if once they became aware of my occupation."

Now, Mr. Editor, I do not relate the above to show how the profession of teaching has often been degraded by unworthy members of it,—though the incident is, I confess, not an inapt illustration of this point,—but rather to show the false and unworthy views that too many, I fear, hold in reference to the duties and responsibilities of the teacher.

Am I wrong in this? Is it not true that many teachers, yielding to a false public sentiment, have been in times past, and even now are, ashamed of their calling? They may not have the unblushing baseness to affirm this in words; but their actions are not seldom unmistakable evidences of their true sentiments. It seems to me that indications of this feeling are not wanting. The constant bolstering-up of the profession by assertions of its dignity, nobility, and honorableness, is, it appears to me, a kind of negative confession of shame in belonging to it—'a whistling to keep one's courage up'. If I am wrong, will some of your readers put me right? If I can be shown to be in error, I will gladly retract.

Now, gentlemen, readers and correspondents of the *Teacher*, do not all fall upon me at once. L.

COMPOSITION-WRITING.—Number VIII.

We have now, in the course of these articles, briefly discussed the means by which the exercise of composition may be rendered less irksome, and the sources whence subjects may be drawn. Our next inquiry naturally is When shall they be read?

In the schools of boyhood days the business was dispatched in wholesale style: that is, all the pupils who wrote compositions read them on the same day—generally on Wednesday or Friday afternoon. What a delightfully monotonous time it was. The first few essays, of course, were received with attention, as furnishing fresh diversion for childish novelty; but as one after another of a long list of writers appeared on the rostrum, to rehearse with the most mechanical articulation efforts

that possessed neither the humor of Hood nor the imagination of Byron, the effect was irresistibly tedious: each additional piece seemed to form a new term in an arithmetical progression of disgust. What a picture the school-room presented of tortured impatience! As a consequence, those performances that were really meritorious fell on tired ears; and restless faces on all sides warned the modest authors to finish the reading of such dull nonsense. Indeed, if the A-B-C department is also under your fatherly care, you will soon discover that the youngsters infinitely prefer the excitement of a paper-ball warfare to all the entertainments of literature.

Whether, therefore, you attend to composition-writing by classes or as a general exercise for the whole school, it will be found far more advantageous to distribute the reading of the essays over the time that intervenes between one period of assigning subjects and the next. For instance, if there are ten pupils in the class and you have them write every week, let two read every day, whenever it may suit—say at the close of the afternoon's recitations. In this way the exercises of each day are agreeably diversified with original efforts; very little time is withdrawn from the regular programme of study; the reading will receive a careful hearing; and both teacher and scholar will feel disposed to display more deliberate and vigorous criticism than when hurried and fatigued by a great variety. W. W. D.

Sterling, September, 1862.

SIX MONTHS IN A PRIMARY SCHOOL.

Would the readers of the *Instructor* like to know my experience in teaching a primary school? It is needless to say how I happened to be placed in such an unexpected position; but you can imagine my surprise the first morning when I looked around on my scholars, about fifty in number, the oldest not more than eleven, to see not more than half-a-dozen faces that looked intelligent. Yet I afterward found some of the richest ore beneath the roughest surface. Dirty, ragged, and staring, my school looked any thing but inviting. What should I do? Only *eight* out of fifty knew their letters, and but three had books. I had never printed a word, and was ashamed to make my awkward hieroglyphics, as I was every moment expecting the directors and the principal. Oh, how much rather would I have worked out a proposition in Algebra or Geometry than put one sentence on the board.

'Heaven helps him who helps himself', I thought, and to work I went.

I seated the scholars in classes, showed them some pictures, told them a story about the drawing with which they were most pleased, then by questions had them relate as much of it as they could remember. I practiced them for some time in going quietly to and from class, in the order in which they sat. At last they were ready for the lesson. I showed them the picture of an ox; had them tell me what it was — whether a bird or an animal; of what color oxen were; what they ate and drank; how they slept; for what they were used, etc.; and at last told them that by the next day they should tell me the difference between the hoof of a cow and of a horse. I then put on the board the sentence "It is an ox"; and thus they learned to read and spell at the same time. By the end of the term the class that did not know a letter had read through the First Reader *intelligibly* to themselves and to those who heard them.

I had never taught small children before, and I puzzled my brain night and day to get the best plan of mingling recreation and instruction. I procured suitable maps, and taught them geography orally, mostly about the United States. They could sing the capitals beautifully; and an orator might have envied me my attentive audience as I pointed out the principal battle-fields and told them the thrilling stories of the Revolutionary war. One day, when the usual exercises seemed a little tiresome to both teacher and scholars, I turned to the map and pointed out Yorktown; told them of the surrender of Cornwallis, and, after showing them a picture where the sword is delivered into the hands of the victors, said, in conclusion, "And now, boys, which beat?" One little fellow, who had been bending far forward in his eagerness to hear, sprang from his seat and, clapping his hands, shouted "We beat, Miss G.; we beat, and the Americans." They had previously learned 'Yankee-Doodle', and *understood* it: I started the tune as I hung up the picture, and you can imagine how they sung; it would have done your editorial ears good to have heard them. You may be sure they resumed their studies — printing words, counting pebbles, drawing squares, writing numbers, etc. — with a zest.

I insisted on cleanliness, and secured it; taught calisthenics by songs connected with physical exercises. I excited a spirit of emulation as to who would print the most neatly and show the most expedition and neatness in writing numbers.

At first they talked and whispered incessantly, and I could not prevent it; but I explained and illustrated the principle of self-government, as applying equally to large and small pupils. I told them that

I was there to *teach*, and each child was there to govern one mind and tongue, one pair of hands, ears, eyes, and feet; and if each child did its duty, how much more effectually and pleasantly I could do my part. And by judiciously commending and rewarding those who were still, and keeping every pair of little hands and eyes busy most of the time, I succeeded in having as quiet a school as any teacher could possibly desire.

In a few days I learned to print as readily as I wrote, and during the term I gained the power of interesting children as I never could before.

I have not time to tell you of how the little ones impatiently waited for the hour of our daily object-lesson, nor of how much pleasure both scholars and teacher derived from it.

Indeed, I think I have been greatly benefited by my experience in this branch of teaching. But the 'conclusion of the whole matter' is that, though I have taught in the high schools of the East, and in some good schools West, I have never had a more pleasant and entertaining school than the primary department of ———.

'Gleaner', in Iowa Instructor.

SERENITY.

'FRIENDS', commonly known as *Quakers*, as a class, live longer than any other persons in the world. The very name of 'Quaker' brings up before the mind the personification of equanimity, composure, and quiet dignity. The serene command at once our confidence, our respect, and our love. The brave are serene, and so are the good. In fact, serenity is our highest dignity; it is godlike! And as we should aim to be like Him, in all the qualities possible to man, it is our duty to cultivate serenity, not only because it promotes length of days on earth and happiness, but does much toward preparation for that after-life, whose duration is endless and whose quality is bliss!

That serenity of mind is a cultivatable characteristic is demonstrated by the existence of the Friends' Society. Their founders were as other men in birth and habits and propensities; but convictions of certain moral and practical truths came upon them, and they emerged into a new life: they 'put off the old man with his deeds', and thereupon framed to themselves a new garb, a 'moral dress', which makes them stand out in the world a distinct and an admired people. Peace

is a fundamental faith of theirs, and peace is serene. Temperance in all things is another article in their creed, and temperance is serene. Even-handed justice toward all of human kind is the pole-star of their practical faith, and justice is serene.

By the practice of these serenities themselves, and by their inculcation upon their children, they have, in half-a-dozen generations, made it an almost inheritable virtue.

While we should cultivate serenity of heart and mind, for the benign influence which it can not fail to have on ourselves and on those with whom we associate, we should not be deterred from the neglect of cherishing a quality so divine by keeping in mind the evils which hourly befall those who give a loose rein to the natural man. The great and good Washington is known to have been an extremely irritable man in early life; but he schooled himself to become as calm as a summer's sea in his later years. Our children should be early taught to look calmly at all things, to speak calmly of all things, and judge calmly of all things; and thus avoid those habits of conversational exaggerations, of hasty judgments, of ridiculous praises, and of demoniacal vituperations, which so commonly prevail, and which are a disgrace at once to the head and the heart of the multitudes who are chargeable in this regard.

The want of this self-control, of this calm looking at trouble and at joy, lays us all liable to death without a moment's notice! Mr. P—— died the other day in this city, from "some words with a gentleman, which excited him greatly." "He was a man of varied abilities, and had held many high and responsible situations," and might have held them for many years to come had he possessed one other 'ability', that of serenity. Mrs. G——, 'a lady of high social distinction', on hearing that her nephew had been elected to Parliament, died under the excitement of the gratifying intelligence.

Let us, then, practice ourselves, and teach it to our children, to look at all things, to think of all things, to speak of all things, 'SERENELY'.

Hall's Journal of Health.

TRUANCY IN THE BOSTON SCHOOLS.

TRUANCY has long been one of the most serious impediments with which educators have had to contend. Much has been said and written on the subject, but no successful plan for preventing it has ever

been devised. The City of Boston, always in the lead in educational reforms, has recently taken the matter in hand, with a determination to trace the evil to its true source, and then adopt effectual means for its removal. She has bearded the lion in his den, and is beginning to handle the juvenile offenders without gloves. Heretofore school-officers and teachers have contented themselves with throwing a few *tufts of grass;* but finding that this 'only made the young sauce-box laugh', the people of Boston have resolved to try what virtue there is in more cogent appliances. In nearly all of the attempts heretofore made to correct this evil the scholar, through misrepresentations and the false sympathy of parents, has triumphed.

Truancy when properly considered is a very grave offense, and is productive of more harm than is generally supposed. It works a serious injury to all parties—the parent, the child, the tax-payer, and the public. Yet, strange as it may seem, if coërcive measures become necessary for its suppression, the parent will palliate it and resist the proper authorities in any effort to correct it. A case recently occurred in our own state, in which the teacher, after remonstrating with both scholar and parent, and counseling with the school-director, applied the rod: upon which the parent sued her, and, stranger still, the wooden-headed justice ruled against her, and fined her *one dollar*, on the ground that he found no clause in the school-law authorizing a teacher to whip a pupil!

The state provides schools for the children in order that they may become intelligent and useful citizens. Hence arises the question—If the state has the right to tax the people for the education of the children, have not the people the right to demand that the children avail themselves of the means of instruction provided for them? As a nation we boast much of our intelligence; but on this point we are rather below the standard. While other nations, to which we some times apply the term *despotic*, have decided this question in the affirmative, have assumed and exercised the right to establish schools at the public expense and to compel the children to attend them, we establish the schools and then permit a few rude scholars and sensitive parents to manage them, greatly to the detriment of those who desire to have their children properly instructed. In this way the vitality of the school is destroyed and a large portion of the public money is annually squandered. This engenders prejudice against the whole system, and furnishes a pretext for the opposition of its covert enemies. It is gratifying, however, to know that the present is an age of progress; and the energetic measures of the people of the Bay State for securing the prompt and regular attendance of pupils furnish abundant

evidence that the public mind is advancing in this important branch of school-government. While we concede that the time and services of the child rightfully belong to the parent, we believe that parents should not be permitted to appropriate for secular purposes the precious moments allotted for the education of their children, especially when the means of instruction have been provided by the state; nor should they be allowed to encourage truancy by needless indulgence.

The City of Boston has an admirable system of juvenile government—the best, perhaps, in the United States. The principle upon which it is founded is that the city authorities are responsible for the government of the child while he is in the streets and public thoroughfares. If, for instance, boys engage in any riotous or improper conduct in the streets or public grounds, they are promptly arrested by the police and taken to a place of confinement provided expressly for the purpose, where they remain until they are released upon the application of the parent or guardian. If they have no parent or guardian, they are turned over to the proper authorities and a home is provided for them. The prison (for such it really is, though not in the general acceptation of the term) is under the charge of the necessary wardens and matrons, and is elegantly fitted up and supplied with every convenience for the comfort of the children. So soon as the name and residence of the parent or guardian are known, he is notified of the arrest, and must appear in person, pay the necessary charges, and receive the child. If the parent really wishes to govern his child, this prompt coöperation of the city authorities enables him effectually to accomplish his purpose. If, on the other hand, he is indifferent about his government, then it is highly proper that the city should govern for him.

Iowa School Journal.

BENEFITS OF PUBLIC SCHOOLS.

THE war between the Northern and Southern States is showing, in various ways, the importance of common-school education. If all the people at the South had been as well educated as the mass of the people at the North, it is presumed they would never have inaugurated such a rebellion. They would have read and thought for themselves, and could not have been made the tools of crafty leaders.

In the Northern States provision is made by which every child, rich or poor, shall receive, free of charge, such an education as will

qualify him for the ordinary business of life. These schools are of such a character that they are patronized by men of all ranks and conditions in life. It is an honor, rather than a disgrace, to have acquired in these primary schools the rudiments of knowledge.

It is not so at the South. There are, it is true, in those states *some* public schools; but they are spoken of as schools *for the poor*, which men of rank and wealth never patronize. The consequence is that the poor, who need the benefits such schools afford, grow up in ignorance rather than attend a school for paupers.

Public sentiment in the South has never been in favor of *universal* education, by which an opportunity is given to the poor to qualify themselves for honorable positions in society. A governor of Virginia, in one of his messages, thanked God that they had in that state no public schools.

Who has not been gratified to see that northern young men, by reason of their ability to read and to reason, can so soon be transformed into well-disciplined troops, and can perform any kind of labor which the exigency of their circumstances requires? They can repair a locomotive, and build a bridge or a railroad when occasion requires.

The friends of public schools and of the Union may learn from facts being developed by the war the benefits of common-school education. When peace returns it must be our aim to extend the benefits of common schools to all the children that dwell in the land.

E. D., in Mass. Teacher.

FAULT-FINDING AT RECITATION.

THE child should be taught to manifest a due degree of *independence in recitation*. There are, however, two extremes here, and chiefly attributable to the practice of the teacher. We shall endeavor to guard him against both. The one is a blind adherence to books and customs, and a cowardly or indolent dependence, which forbids every attempt to think for one's self: the other is an egotistic assurance, or self-conceited effrontery, that sets aside all books and definitions.

It is a disposition and a habit some teachers fall into, of finding fault with authors and every body else whose opinions do not agree with their own. They seem to think it a mark of wisdom to quarrel with definitions and rules. They build up their reputation with the bones of their demolished (?) adversaries, and often build upon their

follies and weaknesses. They live by plunder. They are wiseacres. They are continually making discoveries that others have made long before them, but which *their* better judgment led them to see were no discoveries. They can see but one side of an argument, and that is their side, and unfortunately it is too frequently the wrong side. Such, for example, are those who must live by excitement, always straining to make the world believe that every thing has been going wrong until they happened to be born. They do not spend their time and energies so much in teaching the sciences as in finding fault with them; and hence weaken the confidence of the scholar that needs strengthening, unbend the energies that need stimulating, and unsettle and distract the purposes and knowledge that may have been half-formed.

The other extreme is scarcely less detrimental to true progress, but not so dangerous. The one is absolute destruction; the other is simply a barrier. While the first cuts loose from all mooring, carries no anchor, and ignores all faith save what its own dogmatism invents; the other remains bound fast to the ancient customs, and dares not believe and practice any thing that does not conform to the creed. The one is rabid radicalism; the other, rank conservatism. The one is meteoric, or gaseous; the other is fossiliferous. Both are destructive to healthy growth of mind.

The effects of either of these extremes upon the pupil can easily be imagined. They become either pedantic, self-conceited, and opinionated, or obsequious, stupid, and parasitical. But there is a happy mean between the two extremes; and that the teacher should endeavor to follow. While I would not recommend a blind subserviency to the old usages, and to texts and definitions as laid down by authors; yet I would say agree with authors just as far as possible, lest your distrust and scepticism lead those who have less judgment too far from a settled belief, and lest you distract the interest and attention so necessary to progress. JOHN OGDEN, in 'Science of Education and Art of Teaching'.

TO TELL THE NUMBER OF DAYS IN ANY MONTH.—By counting the knuckles on the hand, with the spaces between them, all the months with thirty-one days will fall on the knuckles, and those with thirty days or less will come in the spaces. January, first knuckle; February, first space; March, second knuckle; April, second space; May, third knuckle; June, third space; July, fourth knuckle; August, first knuckle; September, first space; October, second knuckle; November, second space; December, third knuckle. Student and Schoolmate.

OUR COUNTRY.

Maine, from her farthest border, gives the first exulting shout,
And from New Hampshire's granite hights the echoing peal rings out;
The mountain farms of staunch Vermont prolong the thundering call;
Massachusetts answers—"Bunker Hill!"—a watch-word for us all.
Rhode Island shakes her sea-wet locks, acclaiming with the free,
And staid Connecticut breaks forth in sacred harmony;
The giant joy of proud New York, loud as an earthquake's roar,
Is heard from Hudson's crowded banks to Erie's crowded shore.
New Jersey, hallowed by their blood who erst in battle fell
At Monmouth's, Princeton's, Trenton's fight, joins in the rapturous swell.
Wide Pennsylvania, strong as wide, and true as she is strong,
From every hill and valley pours the torrent tide along.
Stand up, stout little Delaware, and bid thy volleys roll:
Though least among the Old Thirteen, we judge thee by thy soul!
Hark to the voice of Maryland! over the broad Chesapeake
Her sons, as valiant as their sires, in cannonadings speak.
Virginia, nurse of Washington, and guardian of his grave,
Now to thine ancient glories turn the faithful and the brave:
We need not hear the bursting cheer this holy day inspires,
To know that in Columbia's cause "Virginia never tires."
Fresh as the evergreen that waves above her sunny soil,
North Carolina shares the bliss, as oft the patriot's toil;
And the land of Sumter, Marion, of Moultrie, Pinckney, must
Respond the cry, or it will rise e'en from their sleeping dust.
And Georgia, by the dead who lie along Savannah's bluff,
Full well we love thee, but we ne'er can love thee well enough:
From thy wild northern boundary to thy green isles of the sea,
Where beat on earth more gallant hearts than now throb high in thee?
On, on, 'cross Alabama's plains, the ever-flowery glades,
To where the Mississippi's flood the turbid Gulf invades;
There, borne from many a mighty stream upon her mightier tide,
Come down the swelling, long huzzas from all that valley wide,
As wood-crowned Alleghany's call, from all her summits high,
Reverberates among the rocks that pierce the sunset sky;
While on the shores and through the swales, 'round the vast inland seas,
The Stars and Stripes, 'midst freemen's songs, are flashing to the breeze.
The woodsman, from the mother, takes his boy upon his knee,
To tell him how their fathers fought and bled for liberty;
The lonely hunter sits him down the forest spring beside,
To think upon his country's worth and feel his country's pride;
While many a foreign accent, which our God can understand,
Is blessing Him for home and bread in this free, fertile land.

Yes! when upon the eastern coast we sink to happy rest,
The Day of Independence rolls still onward to the West,
Till dies on the Pacific shore the shout of jubilee,
That woke the morning with its voice along the Atlantic sea.

O God! look down upon the land which thou hast loved so well,
And grant that in unbroken truth her children still may dwell;
Nor while the grass grows on the hill, and streams flow through the vale,
May they forget their fathers' faith, or in their covenant fail!
God keep the fairest, noblest land that lies beneath the sun —
"Our country, our whole country, and our country ever one!"

Rev. Dr. Bethune.

SCHOOL EXERCISES.

QUESTIONS SUBMITTED TO THE CANDIDATES FOR ADMISSION TO THE CHICAGO HIGH SCHOOL, JULY 3, 1862. PER CENT. REQUIRED 66.

Arithmetic.—1. Define 'Factor'; 'Multiple'; 'Greatest Common Divisor'; 'Prime Number'; 'Ratio'.

2. What are the prime factors of 63?

3. What will be the effect upon the value of a fraction if you multiply the numerator and divide the denominator of the same fraction by 3?

4. Give the value of $\frac{2}{3}\frac{3}{1}\frac{3}{2}\frac{3}{5}$ in the form of a decimal fraction.

5. How many newspapers 33 inches by 4 feet 2 inches will cover the floor of a room that is 7 yards by 5 yards?

6. What is the interest of $79.25 from Dec. 8, 1861, to July 17, 1863, at 6 per cent.?

7. Suppose in a school of 100 pupils each one breathes 20 times a minute, requiring for each respiration 30 cubic inches of air: What amount of carbonic acid would they produce in six hours, estimating that 5 per cent. of the air inhaled is changed into carbonic acid?

8. A man, being asked the age of his youngest son, said that the age of the eldest was 32, which was $\frac{4}{7}$ of his own age, and that his own age was 6 times that of the youngest son. What was the age of the father, and of the youngest son?

9. A boy in flying his kite finds that he has let out ten rods of string, and from the place where he stands to a point directly under the kite is 100 feet. How high is the kite?

10. What proportions of barley at 50 cents a bushel, rye at 75 cents,

and wheat at $1.00, must be mixed together that the composition may be worth 80 cents a bushel?

GRAMMAR.—1. Write the possessive plural of *lady* and *man*.

2. Define abstract nouns, and give five examples.

3. Compare the adjectives *evil, little, front, much, brilliant*.

4. Decline the pronoun *which*.

5. Give the principal parts of the verbs *strike, forget, pay, hear, foresee*.

6. What is the difference between the *voice* of a verb and its *mode*?

7. Write the conjugation of the verb *be* in the indicative mode and past tense.

8. Write a sentence in which the grammatical predicate is modified by a verb in the infinitive.

9. Parse the italicized words in the following sentences: "He gave *me what* I *desired*." "Milton, the *poet*, was *blind*."

10. Analyze the following lines:

> "Now came still evening on, and twilight gray
> Had in her sober livery all things clad."

GEOGRAPHY.—1. Of what does Mathematical Geography treat? Physical Geography? Political Geography?

2. Name the three largest States in the Union, and the three smallest, with the capital of each.

3. A and B traveled around the earth, A on the parallel of Chicago and B on the parallel of London. Which traveled the greatest number of miles? How many degrees did each travel?

4. Give the boundaries of Ireland.

5. What is the length of the longest day in latitude 74°?

6. What is the width of the Torrid Zone, in English miles?

7. Give the situation of Havre; of Montevideo; of Samarcand; of Odessa; of Caraccas.

8. Name the countries in Europe that border on the Mediterranean.

9. Describe a water voyage from Odessa to St. Petersburg, naming all the waters through which you would pass.

10. Draw an outline-map of Asia.

HISTORY.—1. Mohammed.

2. What was New York first called? Some account of its first settlement.

3. Who was Anne Hutchinson?

4. Compare the character and habits of the early Virginia colonists with those of the early New-England colonists.

5. Formation and establishment of the Federal Constitution.
6. Naval engagement by Commodore Perry.
7. Indian War in Florida.
8. Legislative, executive and judicial branches of our National Government.
9. England under the Romans.
10. Oliver Cromwell.

SPELLING.— Movable. Definition. Preparation. Financial. Carriage. Calico. Settee. Pacify. Satellite. Suffering. Basin. Inseparable. Yeoman. Ceiling. Suspicion. Immersion. Prairie. Cartilage. Resuscitate. Refrigerator.

DICTATION EXERCISE.—In the House of Commons, recently, Lord Robert Cecil stated that the following lines were assigned by an assistant-commissioner as an exercise in Dictation to the children belonging to an Ipswich school:

"While hewing yews, Hugh lost his ewe,
And put it in the *Hue and Cry.*
To name its face's dusky hues
Was all the effort he could use.
You brought the ewe back by-and-by,
And only begged the hewer's ewer
Your hands to wash in water pure,
Lest nice-nosed ladies not a few
Should cry, on coming near you, 'Ugh!'"

Another.—While describing the carnelian hues, and separating the innuendoes, he did not notice that the peddler's gray pony ate a peck of potatoes out of the cobbler's wagon, which the sibyl had gauged.

THE STUDY OF NATURE.

ABSTRACT OF A LECTURE BY PROF. AGASSIZ.

LADIES AND GENTLEMEN: I have been invited to address you this evening upon the subject of an Early Study of Nature as a means of developing the faculties of the young and of leading them to a knowledge of the Creator. I wish to awaken in you the conviction that the knowledge of nature in our days is the very foundation of the prosperity of states; that the study of the phenomena of nature is among

the most potent means of developing the human faculties; and that on these accounts it is highly important that that branch of education should be introduced in our schools as soon as practicable. To satisfy you how important the study of nature is to the community at large, I need only allude to the manner in which, in modern times, man has learned to control the forces of nature, and to work up the materials which our earth produces. The evidence of the importance of that knowledge for the welfare of man is every where before us; and that there is hardly any training better qualified to develop the highest faculties of man,— can I allude to a better evidence than to that venerable old man, Humboldt, who is the embodiment of the most extensive human knowledge in our days, and who has acquired that position, and who has become an object of reverence throughout the world, merely by his devotion to the study of nature? If it be true, then, that a knowledge of nature is so important for the welfare of states, and can train men to so high a position among men by the development of their best faculties, how desirable that such a study should form a part of all education. I believe that the introduction of the study of natural history as a branch of the most elementary education is what can be added to our already admirable system. The only difficulty is to find teachers equal to the task. And the task is no small one; for, in my estimation, the elementary instruction is the most difficult of all.

It is much easier to deliver a lecture to a class of advanced students than to take up the young and teach them the elements. And I believe it is still a mistaken view with many that a teacher is always sufficiently prepared to impart the first elementary instruction to those intrusted to his care. I think nothing can be further from the truth, and that in intrusting the instruction of the young in their first beginnings to incapable teachers we lose frequently the opportunity of unfolding the best minds to the highest capacities, by not attending at once to their wants. A teacher should always be far in advance of those he teaches; and there is nothing more painful than to be obliged to repress those embarrassing questions which the pupils may make, and which may be beyond our reach. The teacher who crams the day before that which he is to teach the next day is never up to his task. He must be capable of facing his class with a consciousness that he is fully competent to instruct in that which is the task of to-day, and to answer any question that may be asked about that which is before him. Not only that, but he should feel capable of fostering these questions, of suggesting them; of rendering his whole class so inquisitive, so desirous of being taught, that there should be no limit to the amount of

necessary information which he can give, besides the repetition of the task assigned for to-day. And it is only the teacher who is far advanced beyond his class who can do that. He who is only equal to his task is not to be intrusted with such an important charge. He must be able to instruct so that the information which he gives at the time may become connected with that which the pupil is to learn afterward; and so I say that the teachers of the elementary school should be selected from among the ablest. They should be the best teachers. They should be capable of rendering the study attractive, interesting, and so pleasant, indeed, that the hour for the school should be the hour expected with anxiety by the scholar, in stead of the hour dreaded as bringing something imposed by duty and not desirable in itself.

This is particularly the case with reference to the study of natural history. The teacher who would undertake successfully to teach the elements of that science must be so far advanced that he knows how to select those topics which are particularly instructive, and best adapted to awaken the interest, to sustain it, and to lead forward to the undertaking of more difficult questions. But it is not only in the study of natural history that it is desirable to have good teachers. I say that even to teach the A B C, or how to read and write, a teacher should know a great deal. And I can see that it requires that inexhaustible thirst for knowledge, which is imparted to human nature, to have children sustain their interest in study when the elements are imparted to them in the manner in which they are imparted. Can you conceive any thing more dry and less attractive than the learning of the twenty-four signs which are called letters, and of combining them in syllables, and then into words,— and all in the most mechanical and humdrum way, as if there was no sense in it? Yet there is a deep sense in it, and there is in every series of letters material for the most attractive and the most instructive information, if it were in the heads of the teachers. Let them show how men have learned to write their thoughts in words; how, after writing was invented, in what way it was used in the beginning; how it has been shortened into the abbreviations made use of to write words as they fall from the speaker's lips, and which are read with as great certainty as if the writer had them before him already written and had only to copy them; and then the children will be eager to learn them, and be ready to avail themselves of the advantages which they possess. But I say that, in order to create that interest in them, they ought not merely to be taught mechanically that such a figure is A, and that another is B, and that another is D, and so on; but they ought to be shown how

men came to think of writing; they ought to be shown that writing, or the letters, are only symbols to express thoughts, and that the earliest and simplest way of recording those thoughts was to represent the object to the eye. Let a class of children be before their teacher, and let the teacher ask them how they would convey to others what they have in their minds. Let him ask how they would convey an idea of what they had seen during the day. They go along the street, they have seen houses and trees and wagons, men, women and children; and now let them, the very first day they go into school and sit on the benches, attempt to represent what they have seen. They have seen trees, and let them represent a tree; and while they make that attempt let the teacher tell them what different kinds of trees they are, and the difference which exists between trees: let him explain that there is a variety of trees, and let him represent the elm, for instance, or the pine, for the elm has a characteristic branch so peculiar that it can never be mistaken for a pine; and then, again, the maple will be represented in a way entirely different from the pine or the elm, arising from the very nature of the tree. On another day let some implement of the household be brought forward and its parts analyzed and represented in the same manner; and when they have been drawn accurately and minutely, and copied on the slate, let them be represented, as it were, in short-hand, by a figure which will come in the simplest outline nearest the object it was meant to represent. And in course of time the pupils will have collected thousands of different images representing things with which they have become acquainted, all of which will be familiar to them; and being called upon to represent one of those objects, they will readily make signs therefor; and, as they advance in that way, it will be found that these signs have become so numerous that it is trying to have so many things recorded; and then will be the time to show the children that this can be done in a more expeditious way — that we need not, in order to record all things with which we are familiar, to have as many signs as there are different things; but that every thing has a name, and having received a name, in stead of recording the thing itself, we may record the name.

We may record the sound of which we express the thing, and to record the sound we may agree to let one of these signs which we use for elm represent a part of the sound of elm — the E; we may use one of the signs by which we represented the maple for part of the sound of maple — the M; we may use one of the signs for representing the pine to signify a part of the sound of the word pine — the P; and then we can combine these signs so as to represent the sounds

with which these objects are designated. That is the way in which the letters were invented. The letters we use now may be traced back to Phœnicia: they are in imitation of the hieroglyphics of Egypt; and if teachers only knew them, they would know at once that these three letters which we read b-a-g are only a representation of signs made in the manner in which these signs were made by the Phœnicians nearly thirty-five hundred years ago. They were borrowed by the Phœnician merchants from the priests of Egypt, and then carried in their business transactions all over the eastern world, and came down, through the Greeks, in our alphabet. Would not these things interest a child? Would they not very soon learn their A B C, and while learning it learn a great deal more which would be useful in their lives afterward? And what may be done for the A B C ought to be done in every branch of study. It ought to be done in the study of astronomy; it ought to be done in the study of geography; it ought to be done in the study of natural history.

A mistake in our elementary education is that we teach every thing in the same way. We resort to books, as if every thing was to be learned from books, and from books alone. I will speak from personal experience. I have been a teacher since fifteen years of age, and am a teacher now, and I hope I shall be all my life. I do love to teach, and there is nothing so pleasant as to be placed in a position to develop the faculties of my fellow beings who in their early age are intrusted to my care; and I am satisfied that there are branches of knowledge that are better taught without books than with books, and there are some cases where it is so obvious that I wonder why it is always to books that teachers resort when they would teach some new branch in their school. When we teach music we do not learn it by heart or commit it to memory, but we take an instrument and learn to play it. When we study natural history, in stead of books, let us take up specimens—stones, minerals, and crystals. When we would study plants let us go to plants themselves, but not to books describing them. When we would study animals let us have animals before us, and not go to books in which they are described.

In geography let us not resort to books, but let us take a class and go out into the field, and point out the hills, valleys, and rivers, and show them what are accumulations of water and expanses of land; and then, having shown them that, let us bring representations of what they are to learn, that they may compare them with what they know, and the maps will have a meaning to them. Then you can go on with the books, and they will understand what these things mean, and will know what is north and east and south, and will not merely read the

letters N. E. S. W. on a square piece of paper, thinking that England and the United States are about as large as the paper they learn from. When I was in the College of Neufchatel I desired to introduce such a method of teaching geography. I was told it could not be done, and my request to be allowed to instruct the youngest children in the institution was refused. I resorted to another means, and took my own children — my oldest, a boy of six years, and my girls, four and one-half and two and one-half years old — and invited the children of my neighbors. Some came upon the arms of their mothers; others could already walk without assistance. These children, the oldest only six years old, I took upon a hill above the city of Neufchatel, and there showed them the magnificent peaks of the Alps, and told them the names of those mountains and of the beautiful lakes opposite. I then showed them the same things on a raised map, and they immediately recognized the localities, and were soon able to do it on an ordinary map. From that day geography was no longer a dry study, but a desirable part of their education.

You may do the same in astronomy. You may use the lamp in the room to show them how a body illuminated may cast its light on others, and how the opposite side is in darkness. Let the teacher turn about in front of the light, and he will show that light is shed on any part of his body as he presents it, and in that way he can teach a child of four years the relative position of the earth and the sun. You can go further, and show the complicated motion of the moon, simply by showing them that while you turn around yourself a piece of paper which you hold may also turn around you, while you radiate about the central point which represents the sun; and in that way the whole movement of the solar system may be explained in a manner pleasant to the youngest child.

But I have undertaken to address you upon the desirableness of introducing the study of natural history in our schools, and of establishing that instruction as developing the faculties and as a means of leading the child to the knowledge of the Creator; and I will now turn to the point of my address.

Natural history, I have already said, should be taught from objects, and not from books; and you see at once that this requires teachers who know these objects, and not merely teachers who can read and see whether the lesson set has been committed faithfully to memory. The teacher must know these objects before he can teach them. And he ought to bring them into the school, and to exhibit them to the scholars; and not only that, but to place them in the hands of each scholar.

Some years ago I was requested by the Secretary of the Board of Education to give some lectures on natural history to the teachers assembled in different parts of the state in those interesting meetings known as teachers' institutes; and I had been asked to give some instruction on insects, that the teachers might be prepared to show what insects are injurious to vegetation and what are not, and that they might impart the information to all. I thought the best way to proceed would be to place the objects in their own hands; for I knew that mere verbal instruction would not be transformed into actual knowledge, that my words would be carried away as such, and that what was needed was the impression of objects. I therefore went out and collected several hundred grasshoppers, brought them in, and gave one into the hand of every one present. It created universal laughter; yet the examination of these objects had not been carried on long before every one was interested, and, in stead of looking at me, looked at the thing. And they began to examine and to appreciate what it was to see, and see carefully. At first I pointed out the things which no one could see. "We ca' n't see them." they said. "But look again;" said I, "for I can see things ten times smaller than these:" and they finally discerned them. It is only the want of patience in the difficult art of seeing that makes it so much more difficult.

The power of the human eye is very great, and it is the want of training which sets so narrow limits to its boundaries. After having examined one object minutely — one of those objects which can be seen every where — take another, one which has some similitude to it. Analyze its parts, one after the other. Point out the difference which exists between this and that examined before, and you are at once on the track so important in all education, which exists in comparisons. It is by comparisons that we ascertain the difference which exists between things, and it is by comparisons, also, that we ascertain the general features of things, and it is by comparisons that we reach general propositions. In fact, comparisons are at the bottom of all philosophy. Without comparisons we never could go beyond the knowledge of isolated, disconnected facts. Now, do you not see what importance there must be in such training; how it will awaken the faculties, how it will develop them, how it will be suggestive of further inquiries and further comparisons, and as soon as one has begun that sort of study there is no longer any dullness in it? Once imbued with the delight of studying the objects of nature, the student only feels that his time is too limited in proportion to his desire for more knowledge. And I say that we can in this way become better acquainted with ourselves. We can understand our own nature, our relations to the world at

large, in a better manner. We can know how we are related to the whole animal kingdom, if we once begin that kind of comparison. At first it may seem difficult to find any resemblance between man and quadrupeds, between quadrupeds and birds, between birds and reptiles, between reptiles and fishes; and if we were to attempt to compare a fish to a man, it would seem preposterous. And yet the two are constructed on the same plan. The same elements of structure which we may see in the fish are, only in a more lofty combination, presented again in the man; and it may be shown in the simplest manner that there is one single gradation leading up from the fish to the noble stature of man. And these comparisons are the best means of developing all our faculties; because they call out not only the powers of observation, but the ability of man to generalize, and at the same time to discriminate. They call into effect all those abilities which distinguish men from men, which give men power over other men, and give men the power of discriminating judiciously, and of combining properly all the ability of discerning differences as well as resemblances: one constitutes the art of observing, while the other constitutes the art of the philosopher.

The difficult art of thinking can be acquired by this method in a more rapid way than any other. When we study logic or mental philosophy in text-books, which we commit to memory, it is not the mind which we cultivate, it is the memory alone. The mind may come in, but if it does in that method it is only in an accessory way. But if we learn to think, by unfolding thoughts ourselves from the examination of objects brought before us, then we acquire them for ourselves, and we acquire the ability of applying our thoughts in life. It is only by the ability of observing for ourselves that we can free ourselves from the burden of authority. As long as we have not learned how to settle a question for ourselves, we go for authority, or we take the opinion of our neighbor: that is, we remain tools in his hands, if he chooses to use us in that way, or we declare our inability to have an opinion of our own. How shall we form an opinion of our own otherwise than by examining the facts in the case? and how can we learn these facts, which are unchangeable, those facts over which man, with all his pride, can have no control?

Man can not make the sun to start off and move in space; man can not change the principles of the solar system; he can not make plants sprout out of their season; he must take the phenomena of nature as they are. They should teach him humility and truth. He should learn that what exists in nature is true, and that to learn to follow truth he must bow to what is; he must bow to what he can not change

from the nature of things: but at the same time he learns to ascertain what is and how things are; and while he learns that, he acquires a power which afterward can be neither checked nor lessened, and which is ever improving in proportion as opportunity for further observation is increasing. I will select a very trivial case to show you in what way we may reach a question from the observation of special facts. Let us take an earthworm. [Prof. A. here drew on the blackboard representations of the things described.] It is a cylindrical elongated animal, with transverse rings all along. Upon each of these rings are stiff bristles, standing out in opposite directions, by the motion of which the animal moves along.

Let us examine the lobster. Here we have another animal, with a body, tail, leg, and a variety of appendages in the shape of claws and legs. It has no resemblance to the earthworm. Let us examine the wasp or bee. Here we have an animal still different. It has wings, and it presents three different regions of the body, and yet it is constructed on the same plan as the others. Let us see what they have in common. There are a succession of rings, one upon the other. If we examine the maggot from which the wasp is hatched, we shall find that it much resembles the earthworm, but as it grows there are fewer rings round the body. [The similarities and differences of the three animals were described at length.] They have at the commencement these things in common—a cylindrical body, divided into a number of joints, which are movable one upon the other. We have, therefore, reached the general proposition that all these animals have a common structure, that they are all built upon a common plan, and that the elements of the structure, the architecture of it, consist merely in the combination of rings. The differences arise only in the progress of growth, and they increase in every region until we have as complicated an animal superior to the lobster as the lobster is superior to the worm.

How was the discovery of these facts accomplished? First, by an observation singly of these things, each independently of the others; then by comparison of all the successive stages of growth of one with the successive stages of growth of the others; then by comparison of all the features with one another; and then we reached the general conclusion, that there was but one plan of structure of the whole. But as soon as we have reached this generalization we have at once also come to the conviction that between animals organized on this plan there can be no similarity to the animals organized on any other plan. We find that our frame is built in a very different way. If we begin to analyze the difference, then we see that what distinguishes man is

his head and brain, his middle body and limbs. It would not be a difficult thing to show that the same bones are found in quadrupeds as in man, and that their limbs and organization correspond. It only shows that the Great Architect knew how to apply the same means to purposes as different as walking and flying. Even in fish the fins are only modified arms and legs, and are constructed on the same plan of arrangement, as may be distinctly traced by any person who would for a moment establish a comparison for himself—not merely by speaking these things, telling them in a school-room, but only where the bodies of the animals are at hand to show them. If you use a specimen in place of a text-book, you will exhibit the similarity which exists between animals constructed on this plan, and you will introduce the most secure foundation for generalization which you can obtain. You will have shown that the backbone of the fish is the same as that which supports our frame; that the bones which support the ill-shaped and elongated head are the same which form our skull and brain; and that the fin which is attached is only an elongated arm. It is only in reference to special adaptation that the differences are introduced. I have entered into details to show you that such objects, exhibited and compared, will suggest ideas, and will lead to the training of the mind in a much more effective manner than any study of mere text-books of general propositions and sentences; and yet I consider that of the utmost importance.

Let me not be understood as if I thought that the study of writers was not of importance. It is only in developing all our faculties for making man what he may be, it is only in giving to his mind that noble development of his faculties, that we urge this subject. If we cultivate the imagination and the memory,—and thus cultivation of the senses is neglected,—the ability of observing is neglected, and all those abilities which man may acquire by the culture of his senses, by the art of observing, are left untrained. The great element is left out of our system—that which appeals to our senses, that which appeals to our power of observing, that which requires activity of manipulation; and while only the imaginative faculties and the memories are cultivated, the other faculties are left starving. In our age, while the study of natural history is so manifestly necessary to the work of men, add that means to the culture of our schools; and to do it as soon as possible, educate the teachers who will be capable of imparting information; and that can be done easily by following the wise method which has been adopted in every branch.

When physical geography was introduced into our schools, how was it done? One man went from school to school, and gave instruction

in that one branch, and his pupils are now teachers. Send us a few scholars who have aptitude for that study, in our principal schools in which we teach natural history; and in the teachers' institutes, and in the schools themselves, let them show what can be taught, and very soon the spirit will be caught and will spread; and in a few years we may have our system of education embodying that important branch of study; and I verily believe it to be one of the most important additions which can be made to our system of education.

WRITE FOR THE 'TEACHER'.

THERE are hundreds of teachers in this state who are sufficiently versed in both the Theory and Practice of teaching to write short articles for the *Illinois Teacher*, who have never yet contributed a single article to its pages; and to such let me say — Write, write for the *Teacher*. If you would benefit yourself, write for the *Teacher*. If you would give others your experience in teaching, write for the *Teacher*. If you would glean from the more varied and extensive experience of others, write for the *Teacher*, and thus induce them to do so — for your own good, for their good, for the good of teachers, pupils and patrons of the Prairie State.

Do n't say you ca' n't — that there are plenty of teachers older and abler than you are to write for the *Teacher;* but set yourself about it, and write a short article on the best method of teaching some particular branch with which you are perfectly familiar, or give items of educational news in your immediate locality, or briefly state some point of difficulty that you have met in teaching any given branch, and ask an elucidation of the knotty point. All teachers, however experienced and highly educated, find knotty points (as well as *naughty* ones) almost every term they teach.

Do not rest after having written once or twice, and say to yourself "I have done my duty, and now I will take my ease until other teachers do theirs"; but see that all teachers in your vicinity take the *Teacher* and contribute their mites to make it more interesting. It is the duty of every teacher, whether male or female, who is worthy of the name of teacher, to contribute something occasionally to its pages, and to use their personal influence to enlarge its circulation and increase its usefulness and efficiency as an educational journal.

We need educational items and local intelligence in regard to school-

matters, from every city, town, village and hamlet in the state. We do not want prosy essays upon the state of education in your locality, but actual school-room experiences, practical suggestions, genuine improvements in methods of instruction and school-government, the results of your 'hobby-riding', the practical workings of object-teaching and physical training in your school.

Short, pithy and concise articles upon the above and other kindred topics are just what is wanted to make the *Illinois Teacher* what it should be—a journal full of rich and ripe experiences, of educational news and local items of interest from all parts of the state, to keep us posted in regard to all of the leading schools, the changes and improvements in them, so that its readers may know just where and just what every 'live' teacher in the state is doing; for every such teacher has a wide field of observation, and must, now and then, observe some incident or have some experience which would be interesting and instructive to others if briefly and concisely stated.

Fellow teachers, it rests with you to say whether our very interesting journal shall become each month more interesting and valuable than it has been. We say again to all teachers and friends of education—Write for the *Teacher!* M. V. B. S.

Yes! we 'second the motion', and thank our friend for suggesting it. Give us at least some local matters. Tell us the names of the teachers who have gone to the war. Send in the manuscript, carefully prepared, and we will gladly give it room.—Ed.

HINTS UPON THE PRACTICAL DUTIES OF THE TEACHER.

SECOND PAPER.

ORGANIZATION OF A SCHOOL.

We come, then, to the literary attainments of the pupil as the principle on which he is to have his place in school assigned to him. But let it not be forgotten that the adoption of this principle is only a compromise, by which we take for the true thing (viz., the capacity for receiving instruction) another, more easy to measure, which is, as just stated, the degree of attainments made by the student. If the teacher possessed the power of looking into the mind of the child, and fully and accurately gauging all its capacities; if he could see at a

glance just how much the mind was fitted and able to do — just how difficult a subject, or portion of a subject, it could successfully grapple with; if he could do this, he could at once determine the pupil's place in the class — where he should be in respect to others. The real question always is, when a student is proposed for a certain class, Is his mind exactly adapted to the work of this class? Will the doing of this work give him precisely the mental discipline he needs, a better mental discipline than if it were easier or more difficult? Of course, to determine the previous attainments of the pupil answers this question only approximately: and, for reasons already stated, this approximate answer is usually taken as the true one.

But this rule of classing pupils by their attainments, like all other approximate rules, requires occasional modification. Suppose a boy of good abilities, advanced in years though not in knowledge; one whose opportunities have been so slight that he has grown up to the stature of a man without having acquired that knowledge so necessary to the perfection of the manly character, but who, nevertheless, feels his deficiency, and is willing by earnest labor to supply it. Would it be the part of wisdom always to class him with the small children who are his equals in knowledge? Not so. Let him see that the peculiarity of his position is appreciated, that greater things are expected of him than of the 'little boys'; and for this purpose put him a little in advance of where his mere attainments would place him. If he has good abilities, he will be able to advance more rapidly than the younger classmates of the same attainments, because of the greater maturity of his faculties.

Again: A slender and delicate child has an abnormal growth of brain, and an undue development of mental power, making him a prodigy of mind while only a weakling in body. His nervous energy is easily aroused. It requires no skill to set him intensely at work upon a problem or a train of thought. Here, again, the approximate rule must be modified. This child must not be classed with those whose attainments he may equal, but whose age and physical strength enable them to endure daily tasks that would utterly crush his feeble frame. He must be measured not by his attainments strictly, but by his capacity for receiving instruction and doing work.

These cases are cited to show the necessity of the exercise of judgment, on the part of the teacher, in the matter of classification, so that in adopting the more obvious but less exact principle he may still have in view the more philosophical but more difficult one.

And what should be the aim of the teacher in respect to the size of classes? Should he strive to make them as large, or as small, as pos-

sible? This question may be answered by observing the objects to be aimed at in the class exercise. It will be sufficient for this purpose to mention two of these — the examination of the pupils, and the imparting of instruction. In the class exercise, or 'recitation', so called, the teacher is to find what his pupils know, and where he finds them unable, after a proper amount of work, to understand some point, is to instruct them in it and to make it clear.

Now for the first of these objects, the smaller our class the better. Given twenty minutes for the exercise, and four members for the class, it is clear that the instructor may devote five minutes to ascertaining how much each one knows of the lesson; whereas if the number be twenty, only one minute each can be employed in that effort: and in the former case the work will be more thoroughly and satisfactorily done than in the latter.

But for the latter object — namely, the imparting of instruction — it is often said that time is saved in the exact ratio of the number in the class. But this is far from being the case. It is not true, as is some times declared, that a particular truth or principle may be taught to a hundred in the same time as to one. You may *say* it to a hundred in the same time as to one; but saying a thing to a number of persons is not, in any thorough sense, teaching it to them. The noisy declaimer, who, having committed to memory some body's 'glittering generalities', retails them in sounding phrase to his pupils, and calls that teaching, may operate as effectually upon a square mile of children as upon a half-dozen. But not so the thorough and philosophical teacher, who at every step sees to it that, so far as circumstances admit, he is meeting the mental wants of his pupils. With him, every statement of a principle is followed by keen and searching questions, that reveal the precise mental state of every member of his class. And this takes time.

Thus far, then, the advantage is with the small class. But there are other points to be considered. Mind, to attain the highest activity and efficiency, must act under some stimulus; and nothing so stimulates and energizes mental activity as the presence of another vigorous and active mind. Hence the magnetism that is always generated by great numbers engaged in a single pursuit. In a small class this magnetism is but feebly engendered, and mind moves with a sluggish pace, and, as a consequence, never does all it can — is never tried to its utmost capacity, and, as a consequence of this, does not derive that increase in power which the other conditions secure.

Again, in the world of mind, every idea expressed becomes common property. A thought suggested by a child is caught up by every

classmate, and does its work upon every soul. The mental wealth of each is equal to that of the whole, notwithstanding the axiom that a part is less than the whole. And, of course, the larger the class the greater the gain in this respect.

We must not forget, however, that in order to derive these advantages from a large class the teacher must have perfect control of it. This, where the numbers are very great, involves an enormous expenditure of nervous energy; and there is always in this respect a limit beyond which the teacher has not the power to go. Like a vast empire with a feeble central government, a class excessive in size lapses into intellectual anarchy.

We state, then, as our conclusion, that, in view of the advantages and disadvantages of large and small classes, the size should be so large as to secure to a reasonable extent the magnetic influence of numbers, and so small as to bring every individual under the careful and efficient scrutiny of the teacher,—to make it possible for every pupil to recite every day. E.

GRAMMAR IN RHYME.—Every little grammarian just entering upon the mysteries of syntax will find it highly advantageous to commit the following lines to memory, as by so doing many a black mark, and perhaps many a flogging, will be avoided:

1. Three little words you often see
 Are Articles — *a*, *an*, and *the*.
2. A Noun 's the name of any thing,
 As *school* or *garden*, *hoop* or *swing*.
3. Adjectives tell the kind of Noun,
 As *great*, *small*, *pretty*, *white*, or *brown*.
4. In stead of Nouns the Pronouns stand —
 Her head, *his* face, *your* arm, *my* hand.
5. Verbs tell of something to be done —
 To *read*, *count*, *sing*, *laugh*, *jump*, or *run*.
6. How things are done the Adverbs tell,
 As *slowly*, *quickly*, *ill*, or *well*.
7. Conjunctions join the words together,
 As men *and* women, wind *or* weather.
8. The Preposition stands before
 A Noun, as *in* or *through* a door.
9. The Interjection shows surprise,
 As *oh!* how pretty; *ah!* how wise.

The whole are called Nine Parts of Speech,
Which reading, writing, speaking teach.

MATHEMATICAL.

SOLUTIONS.—XXI. In $22\frac{1}{2}$ days A travels 405 miles; and B travels the same distance, because A turned back 9 days' travel for B, which he had to travel over again in pursuing his journey, making 18 days of B's traveling: $18 \div 22\frac{1}{2} = 40\frac{1}{2}$; and if he travel 405 miles in in $40\frac{1}{2}$ days, in 1 day he will travel $405 \div 40\frac{1}{2} = 10$ miles, *Ans.* Q. Q.

[Solution also by F. K. H.]

XXII. According to data of problem, a man could dig a bushel of potatoes in $\frac{1}{30}$ day, pick it up in $\frac{1}{75}$ day, and unload it in $\frac{1}{100}$ day; so that to dig, pick up and unload a bushel of potatoes would require $\frac{1}{30} + \frac{1}{75} + \frac{1}{100} = \frac{17}{300}$ day. If he can dig, pick up and unload a bushel in $\frac{17}{300}$ of a day, then in $\frac{300}{300}$, or a whole day, he could dig, pick up and unload as many bushels as $\frac{300}{300} \div \frac{17}{300} = 17\frac{1}{7}$ bushels, *Ans.* C. E. S.

[Answered also by M. V. B. S., F. K. H., and J. K. Broombaugh.]

XXIII. At 4 o'clock the minute-hand would make an angle of 120° with the hour-hand; so that the minute-hand must gain 20° upon the hour-hand to make with it an angle of 100°. Now the distance moved by the minute-hand is $\frac{12}{11}$ of the distance gained; and $\frac{12}{11}$ of 20° = $21\frac{9}{11}$° = distance moved by minute-hand. But as the minute-hand moves 360° in 60 minutes, in one minute it moves 6°, and to move $21\frac{9}{11}$° would require as many minutes as the number of times 6° is contained in $21\frac{9}{11}$° = $3\frac{7}{11}$. *Ans.* = 4 o'clock $3\frac{7}{11}$ minutes. F. K. H.

[Solved also by M. V. B. S.]

XXIV. The difference of their squares (231) ÷ their difference (7) = their sum. $\frac{33-7}{2} = 13$ = smaller number; $13 + 7 = 20$ = greater number. M. V. B. S.

[Solved also by F. K. H.]

PROBLEMS.—XXV. What is the 0 power of a? Q. Q.

XXVI. A has silk at 60 cents per yard cash, and 72 cents per yard barter: B has 3610 yards of cotton cloth at 44 cents cash, and wishes to exchange with A, but demands of him $400 in cash and the balance in silk. How much per yard does B receive for his cotton cloth, and how much silk does he receive in exchange? M. V. B. S.

XXVII. A and B skate on a wager from opposite points 16 miles apart, each to the other's starting-point. A, by having the advantage of a uniform wind, makes his point $2\frac{1}{2}$ times quickest, and 48 minutes sooner than B. Required the time each was skating, and the force of the wind per minute. Arithmetical solution required. M. V. B. S.

XXVIII. James and John have each a number of marbles. If John wins 2 from James, then he has 3 times as many as James has left; but if James wins 2 from John, then they have each an equal number. How many had each at first? Arithmetical solution required. F. K. H.

XXIX. A girl going to market with a basket of eggs on her head had them knocked off by a rowdy, for which he was fined and had to to pay for the eggs. When asked how many eggs she had, the answer was—When I put them in one at a time, there was one over; three at a time, there was one over; four, five or six at a time, there was one over; but when I put them in seven at a time, they came out even. How many eggs had he to pay for?

OFFICIAL DEPARTMENT.

OFFICE OF PUBLIC INSTRUCTION,
Springfield, Ill., October, 1862.

THE SOLDIER-TEACHERS OF ILLINOIS.—SPECIAL TO SCHOOL COMMISSIONERS.

We hold that knowledge is power, in war as well as in peace. True education does not disqualify for deeds of martial prowess and heroism. It does not enervate character, dwarf manly aspiration, and repress enthusiasm for lofty deeds; but, on the contrary, it gives tone and grandeur to all the elements which constitute the soldier and patriot. It is true that men may fight who know not the difference between a republic and a monarchy, who are as ignorant of letters as they are of the nature of true patriotism. There may be a stolid insensibility to fear, or a reckless impetuosity of nature, that will launch men onward to the deadly charge, or hurl them forward to the cannon's mouth. But this alone is not true courage. Such martial fire is often as evanescent as it is intense, as unreliable as it is impetuous. It dies with the momentary fuel that feeds its flame. It succumbs to defeat, disaster, and protracted hardship. Having no root in the imperishable soil of conviction and truth, it soon withers away.

Not such is the courage of those who are masters of the national and historic issues for which they contend; whose patriotism is inspired by that love of country which springs from a knowledge of the beauty

and glory of her institutions, and of the unchangeable principles of liberty and rectitude upon which they are founded. Animated by the dauntless purpose to maintain and defend those institutions and principles, and transmit them unimpaired to ennoble and bless future ages, such men can not be conquered. Defeats do not dismay, disasters do not dishearten them. Patient under hardship and suffering, brave and hopeful in the weary march, in the fever-stricken camp, in the longings of the heart for home and friends, and in the innumerable delays that put off the hour of triumph,—still, with immortal faith that sooner or later victory will come, they press steadfastly on; they endure as seeing the invisible glory that shall surely crown the future of their beloved country.

To a valor no less resistless in the hour of battle than that displayed by those who are strangers to the grounds of their lofty heroism, these men superadd the matchless courage, the invincible will, the unfaltering trust in the ultimate success of their cause, which are born only of an intelligent conviction that the cause is *just*. They are the Roundheads of the Union host. The unthinking may deride, but still it is true and ever will remain true that *ideas* rule the world. Those wars only are permanently successful which are waged upon and for the defense of right ideas. Those soldiers only are invincible, in the long run, who are capable of fighting for right ideas. *Duty* is the watchword of the British soldier: *glory* is the glittering sentiment for which the Frenchman fights. Liberty, patriotism, honor, duty,—all, all combine in the brave, intelligent Union volunteer; and these sentiments, these ideas, will make him ultimately invincible. Hoc signo vincet.

These truths have been verified in history—they are being verified now. Without detracting from the equal merit of other classes of our citizen soldiery, I would point with pride to the illustration of these truths in the case of those with whom we are more particularly identified—the teacher-soldiers of Illinois. I have watched their career with solicitude, and read their record with exultation. It is noble, glorious. And now I propose to collect their names from the scattered camps of the Union,—all who are living, all who have fallen,—that we may know and honor the former, and cherish with loving affection the memory of the latter.

Will you, therefore, send to this office, with your annual report, a statement, in tabular form, of the teachers in your several counties who have enlisted in the service of the country? The form should be ruled for the following items: (1) Name; (2) Residence; (3) Place where he taught; (4) Number of the regiment and letter of the com-

pany in which he enlisted; (5) Rank in same; (6) Battles or skirmishes in which he was engaged; (7) Whether slain, or wounded, etc.

The table can easily be prepared, and with a little effort the information can be procured; and the result will be a catalogue of names and a mass of facts of the deepest interest to us all.

This is only a recommendation, of course, upon which you can act or not, as you see fit; but I should be extremely gratified to receive such a report from every county in the state, and with this earnest assurance I respectfully leave the matter with you.

EXCLUSION FROM SCHOOL IN CERTAIN CASES.

The right of an individual to attend the common school can not be insisted on at the expense of the equal rights of others.

Pupils infected with any contagious disease may be temporarily removed from school by the directors.

Dismissal from school is usually resorted to as a *punishment* for grave and obstinate offenses. When the moral depravity of a child becomes so great that his example is dangerous to the purity of the school, or when his insubordination is so bold and incorrigible as to be fatal to the discipline of the school, duty to the other scholars demands his removal. He has forfeited his claim to the benefits of the school; he can no longer enjoy those benefits without infringing the moral rights of others, and justice demands his exclusion. He has no right to remain, for no rights can attach to the individual the exercise of which is incompatible with the equal rights of others.

This principle has important applications. It justifies, and even requires, the removal of a pupil from school, in certain cases, when no offense has been committed. It teaches clearly that *punishment* for evil-doing is not the only ground upon which dismissal from school can be justified; that *protection* from evils which, though serious, imply no wrong in the parties concerned, is some times an equally valid ground for the temporary removal of a pupil from school.

In the light of these views, it is perfectly clear that directors may and should exclude from school, for the time being, pupils infected with offensive and contagious diseases: not for any fault or wrong on their part, but simply because their presence, under the circumstances, is incompatible with the safety and comfort of others. Their personal rights in the common school are for the time in abeyance; they must be surrendered till they can again be exercised without infringing the equal rights of others.

In the language of another, "The right to enjoy the benefit of common schools, established for all the inhabitants, is a common, not an

exclusive personal right; then, like other common rights,—that of way, for instance,—it must be exercised under such limitations and restrictions that it shall not interfere with the equal and coëxtensive rights of others. Take the case of contagious diseases: Can it be doubted that the presence of a pupil infected could be lawfully prohibited—not for any fault, or crime, or wrong conduct, but simply because his attempt to insist on his right to attend, under such circumstances, would be dangerous and noxious, and so an interruption of the equal and common right?" (*Vide* 8 Cush. Mass. R., 164.)

ELECTION DISTRICTS—ADMISSION OR REJECTION OF BALLOTS IN CERTAIN CASES.

A school-district may be an 'election-district' within the meaning of the statute.
The right to vote in a school-district is conditioned upon a *bona fide* residence in said district of 'at least thirty days'.
When there is a tie between the judges on the question of receiving a ballot, the *presumption* of the law is in favor of the voter: the ballot should be admitted.

The above conclusions are reached in the discussion of the following questions:

1. "If there are two school-districts in the same general voting precinct, can a man who has long resided in one of said districts lawfully vote at a school-election in the other of said districts, he having resided in the latter but four days?"

It is held that he *can not*. Section 8 of an act entitled 'An Act to provide for ascertaining the qualifications of voters, and to prevent fraudulent voting', approved February 22, 1861, provides that 'no person shall be considered, under any circumstances, as having a residence in any ward, or election-district, or precinct, unless he shall have had a permanent abode therein for at least thirty days immediately preceding such election'.

The question turns upon the proper construction of the phrase 'election-district'. Does it mean voting-district or precinct, under the general election-laws of the state; or does it mean the particular district, precinct, or territory, in and for which the proposed local election is to be held? The latter is held to be the true interpretation. The 'election-district', in the case submitted, is the particular school-district in which the election is held. Residence in the latter does not accrue in virtue of residence in the general voting-precinct. There must be a *bona fide* residence in said *school-district* of 'at least *thirty days*' to confer the right to vote therein. (See Laws 1861, p. 269.)

2. "The School-Law, Sec. 42, provides that two of the directors shall act as judges, and one as clerk, at district elections. Now, in case the two judges disagree in receiving a ballot, how shall the matter be decided between them?"

The question is not specifically answered in the School-Law; but if a ballot is not decisively rejected by the judges, I am clearly of the opinion that the presumption of the law would be in favor of the voter's right to cast his ballot. Every ballot must be either received or rejected. In doubtful cases the voter may be sworn. If the judges are still not agreed and a tie ensues, owing to the peculiar construction of the board of judges, the presumption, I am satisfied, is in favor of the voter, and the ballot should be received. All laws restrictive of the rights of citizens should be liberally construed in their favor.

SCHOOL-OFFICERS AND THE GOVERNMENT DRAFT.

School-officers, as such, are not exempt from the draft of the Federal Government.

Section 72 of the general School-Law, approved February 22, 1861, provides that "School commissioners, trustees of schools, school-directors, and all other school-officers, shall be exempted from military duty."

And the third item of the fourth paragraph of 'Regulations for the enrollment and draft of the militia', issued from the War Department August 9, 1862, provides that the commissioner shall strike from the lists of those enrolled for draft the names of 'all persons exempted by the laws of the respective states from military duty'.

But Article 1, Section 1, of 'An Act to amend Chapter 70 Revised Statutes, entitled 'Militia'', passed *May third*, 1861, declares that "The militia of the State of Illinois shall be composed of *all* free white male able-bodied citizens thereof, who are between the ages of eighteen and forty-five years; and for the purposes of this act permanent residents shall be deemed citizens."

And Article 2, Sections 2 and 3, of said act, referring to the whole body of the militia defined in Article 1, Section 1, declares that they shall all be 'subject to call or draft into service, at the requisition of the Governor'.

And finally, Section 5, Article 5, of said act is in the words following: "All acts or parts of acts inconsistent with the provisions of this act are hereby *repealed*."

The last clause of Section 72 of the School-Law *is* inconsistent with the provisions of the above-named act. Hence 'school-officers are not 'exempted by the laws of the state from military duty'; and not being included in the classes of exempts enumerated by the Secretary of War, 'school-officers' are therefore liable to the government draft.

SCHOOL-OFFICERS — HOW DISQUALIFIED.

A school-officer can not at the same time hold an office under the Federal Government: the two are incompatible.

The Constitution of this state (Article, Section 29) provides that "No person holding any office of honor or profit under the Government of the United States shall hold any office of honor or profit under the authority of this state."

It follows that when a school-director, trustee, or other school-officer, accepts a *commission* in the federal army, his office as director, etc., is at once vacant, *ipso facto*, and a meeting may be called to fill the vacancy: no resignation is necessary. This applies only to those who receive commissions, who become federal *officers*; but I can not too earnestly recommend to all school-officers who enlist in the service of their country, to be absent for three years or during the war, the propriety of resigning as school-officers before leaving home for the camp or field, so that their places in the school-boards may be filled, and the interests of education suffer no loss through their absence.

There are other applications of the constitutional prohibition quoted, which will readily occur to those concerned.

STATE CERTIFICATES.

The Fourth Examination will be held in December: timely notice will be given of the day and place.

STATISTICAL REPORTS.

Township Treasurers' Reports for the school-year ending October 1, 1862, are returnable to school commissioners on or before the thirteenth day of that month; and the reports of school commissioners are due at this office on or before the tenth day of November.

I most earnestly request all school-officers to be prompt. By special effort all the reports may be on file by the day indicated. Will you not try to be on time? I can not commence my statistical report till the returns are all in.

TO THE FRIENDS OF COMMON SCHOOLS IN ILLINOIS.

It has seemed to me that any apparent departure, in the subjoined appeal to the friends of common schools, from what is customary in an official circular like this might be justified by the extraordinary and fearful condition of the country, and the danger that the claims of home interests will be lost sight of in the absorbing military necessities of the times.

Amidst the alarms of war and the tumultuous fury of the assaults of traitors upon the life of the government, we must not neglect the education of our children. While we stand ready to join our brethren already in the field, and swell the hosts of the Union, at the call of our country, let us not lose sight of the fundamental principles upon which alone a government like ours can endure.

Universal education must coëxist with universal suffrage. Intelligence and virtue must be commensurate with the magnitude and sacredness of the duties and franchises of the citizen. Republican institutions have no inherent self-purifying and self-perpetuating force. Men are not born upright and enlightened voters, any more than they are born wise and virtuous rulers. They must be elevated by training and culture to the comprehension of the duties as well as the rights of citizenship in a free government. Knowledge and integrity must penetrate the body politic through and through.

Notwithstanding the tremendous ordeal through which our political system is passing, with my whole soul I believe it will prove equal to the trial — that its strength and glory will be vindicated. Man must be capable of self-government. If there is a political heresy against which my nature revolts, it is the atheistic dogma that God has doomed the race to alternate for ever between anarchy and despotism; that he has implanted vague longings after a nobler citizenship, a purer social order, than the Old World ever knew, which can never be realized; that the dear hope of a political system based upon the free, intelligent consent of the governed, with no king but Jehovah, no peerage but personal worth; that all this is only a vision of Utopia, a baseless dream of the imagination, destined evermore to dissolve and perish under the ordeal of experience.

No! it can not be! But there must be preparation, discipline, training; and it is the province of our public schools to supply this culture — to form generation after generation of loyal, virtuous, patriotic citizens. Are we not being taught, in the light of the parricidal fires of this fearful rebellion, how vital is the relation of universal education, of free schools, to the fate of the Republic? Not a state in rebellion to-day has ever had a practically-developed free-school system worthy the name; scarcely a loyal one that is not proud of its common schools. The line of free schools divides the loyal and the rebel states almost as sharply as that between the camps of the contending armies.

The precious inheritance of our fathers is in peril. The legions of loyalty and treason are in deadly strife. The noblest and bravest of the sons of the Northwest are in the field. Thousands have left the school-room for the camp and the battle-field. Side by side teachers

and pupils are formed in the ranks of war. Hundreds who learned from loyal lips in the quiet school-room how to love their country now learn by heroic example, in a sterner school, how to fight, how to die, for their country. More than a thousand teachers are marshaled under the banners of the Union from Illinois alone. The result can not be doubtful. Justice, truth, honor, liberty, Christianity, are on our side, and sooner or later the mad legions of rebellion and treason must go to the wall.

What a time is this in which to live and act! What fires are these in which to consume the dross of littleness and selfishness, and evoke the patriot and hero! How shall posterity look back upon the men of this generation? Shall our names be linked with the cowards, or the patriots—the Arnolds, or the Washingtons, of this terrible day?

If we would so shape the destinies of our generation, in these years of mortal struggle, as to embalm our memories in the hearts of our descendants; if we would so discharge the sacred trusts committed to us that posterity shall bless our names for our wise and holy fidelity to duty; if we would train loyal hosts to swell the ranks of the grand army of the Union: nay, if we are not prepared ere long to look our last upon the glory-trophied Ensign of the Republic, to drop the last tear over the grave of Washington, and suffer the swelling notes of our national anthems to die upon our ears for ever;—if we are not ready for all this, but still long and pray, with passionate tears of love and admiration, for the integrity and glory of our precious national inheritance till for ages the turf shall have been green upon our breasts;—let us be faithful to the duties of the solemn present; let us look well to the education of our children; let us support our common schools.

Said Daniel Webster, as he stood before the monument on Bunker's Hill, to commemorate its completion, "Men of New England, *I* am not your speaker to-day. There, *there* is your orator, with the clustering glories of the revolution upon its sunlit brow, and the record of heroes and martyrs graven upon its eternal adamant! There it stands, and there it *will* stand, proclaiming from age to age how precious and holy a thing is Liberty!"

As the only means of maintaining and perpetuating that 'holy thing', our national liberty and Union, may I not direct your gaze to a monument more glorious and enduring than the memorial granite on Bunker's Hill—the fabric of national education, of universal intelligence and morality, which we must rear and sustain, or, sooner or later, we shall perish with a perdition deeper than ever befell any other people.

NEWTON BATEMAN, Sup't Public Instruction.

EDITOR'S TABLE.

EDITOR'S CHAIR.

SOLDIER-TEACHERS — THE ROLL OF HONOR.— We recently made the suggestion to the Department of Public Instruction that we should apply to friends, neighbors, and school commissioners, to furnish us the names, residences, etc., of the teachers who have gone out to battle; but the Superintendent suggests a more reliable way, and makes the appeal to county commissioners to furnish the matter desired to the Department. We hope the commissioners will take every means in their power to get the names, etc., of these men. When it is complete, as we hope it will be ere long, we will secure it for publication in the *Teacher*, as well as among the state papers. See Mr. Bateman's Circular.

DR. WILLARD.— We learn with pleasure of the appointment of our friend and colaborer Dr. Samuel Willard, for two years Editor of the *Illinois Teacher*, and for a portion of that time Professor in the Normal University, as Surgeon in the 97th Regiment Illinois Volunteers. The appointment is a good one. We know of no one whose head and heart fit him better for such arduous and at the same time humane and heroic service than Dr. Willard's. We are sorry to be deprived of the assistance rendered us by the ready pen of the Doctor; but we gladly submit, knowing that our loss is the gain of many a poor suffering soldier, who will be rendered happier by his services.

WARLIKE.— We received a kind farewell letter from our friend and former pupil Samuel M. Heslet, Principal of the Union Graded School of Mendota, who has enlisted for the war as Captain of a company. Captain Heslet's pupils presented him with a sword, as a token of regard, previous to his departure. His company went into camp at Ottawa.

M. W. Tewksbury, recently Principal of High School in Freeport, was elected First Lieutenant in Captain Heslet's company. Six other teachers, whose names we have not received, were also enlisted in the same company.

Another Soldier.— We learn that Mr. Thomas J. Morgan, formerly Principal of the High School at Atlanta, has left his position to serve as First Lieutenant in one of the Indiana Regiments.

And Still Another.— Mr. James B. Kerr, of Rockford, known to all who have attended the meetings of our State Teachers' Association as one of the most active and efficient members of that body, has been commissioned as Lieut.-Colonel of the 74th Regiment Illinois Volunteers. At the last meeting of the Association Mr. Kerr was selected as Chairman of the Committee on Programme for the session to be held at Rockford in December of this year.

THE STATE DIPLOMA.— MOLINE, *August*, 1862.

A. M. GOW, ESQ.— *Dear Sir:* I am much pleased with your able and earnest efforts to induce all worthy teachers to come forward and enroll their names among those who hold the Illinois State Professional Diploma; yet I regret that so few availed themselves of the favorable opportunity just passed. I have used my personal influence to persuade all whom I deem worthy to attend, but have not been so successful as I should have been in less exciting times. I regret very much to learn that some teachers whom I have seen at our State Associations, and whose present positions and standing as teachers would lead me to expect better things, are speaking lightly of and using their influence against State Certificates, by telling those who ask their opinion of them (as leading educators) that they regard them of 'little consequence', and as a 'grand humbug'; that they are 'very ea-

sily won'. Now I want you to give such teachers a bit of advice through the *Teacher:* and I assure you that when I meet one or two whom I can name I will use my tongue vigorously in defense of the policy and plan of State Certificates, and against such conduct as they have shown in regard to them. You must not fail, for the good of the cause, to give all such teachers a sound drubbing with your editorial cudgel; for we have a right to expect that every teacher in the state, who makes or intends to make teaching a business for a reasonable length of time, will embrace the earliest opportunity to have his or her name enrolled among the legally-recognized professional teachers. S.

We do not strictly agree with our friend in the necessity of devoting time and space to the consideration of those who are weakly endeavoring to stop the educational current with straws. We presume there are few, very few,— and we had not heard of any until we received the above,— who dare to put themselves in opposition to any movement which has for its object the elevation of the standard of professional excellence. If there are such persons, it is our opinion that they bear the same relation to the profession of teaching that certain worthies do who consider themselves specially commissioned to preach the Gospel, and take every occasion to make known the supreme contempt which they entertain toward those who have had the *misfortune* to be educated in a college. The only way to 'cudgel' such people is to let them alone severely.

The Press.— We notice in the Bureau County *Republican* a column devoted to the interests of Education, and edited by the County Commissioner of Schools, Mr. N. Mathews. What a happy and powerful influence might be exerted if in each county the local press should be made the instrumentality of enlightenment on the subject of education. Will not teachers and commissioners undertake to exercise this influence in every county in the state?

LOCAL INTELLIGENCE.

Mendota Patriotism.— At a meeting of the Board of Directors of the Mendota Union School, the following resolutions were presented and unanimously passed:

Resolved, (1.) That, whereas our highly-esteemed Principal, S. M. Heslet, who has faithfully and successfully served us as teacher for the past two-and-a-half years, has patriotically volunteered in the service of his country, we unanimously request him to continue in the same relation to us, and give him leave of absence.

(2.) That in the new and responsible position to which he is called, as captain of a company of volunteers, we crave for him the highest success.

S. B. GILBERT, Clerk of Board.

Mendota, *Aug.* 28, 1862.

Henderson County.— We have received from the Secretary of the Henderson County Teachers' Association, W. A. M. Crouch, a full account of the proceedings of a semi-annual session held at Olena, August 26th, 27th, and 28th, for which we regret that we can not make room in this number of the *Teacher*. The topics for discussion and drill were Orthography, Reading, Music in Schools, Arithmetic, Geography, and Grammar. Essays were read by several members of the Association. Resolutions were passed expressing the views of the Association, as follows: that the repetition of syllables in spelling is unnecessary and a waste of time; that school-directors ought to attend the meetings of the Association, and inviting those present to take part in the exercises; that it is necessary for pupils to commit to memory rules in Arithmetic; censuring parents for neglecting to visit schools; that fitness, rather than price, should be chiefly regarded in employing teachers; that Music should be introduced in schools whenever practicable; upon the state of the country, and the purpose of those present to instill into the minds of their pupils love for the Union and its republican institutions; urging upon teachers the duty of subscribing for and reading educational journals, and recommending the *Illinois Teacher;* thanking the citizens of Olena for their hospitality; and ordering the publication of the proceedings.

NOTICES OF BOOKS, ETC.

EDUCATIONAL BIOGRAPHY. Memoirs of Teachers, Educators, and Promoters and Benefactors of Education, Literature, and Science. Reprinted from the *American Journal of Education*, edited by Henry Barnard, LL.D., Chancellor of the University of Wisconsin. Part I.— *Teachers and Educators*. F. C. Brownell, New York; Geo. Sherwood, Chicago.

This elegant and valuable book of 524 pages should be upon the table of every professional teacher. It contains notices of thirty eminent educators, some of whom are still living. The work is embellished with fine steel-engraved portraits of Horace Mann, T. H. Gallaudet, Denison Olmsted, Mrs. Emma Willard, James G. Carter, Warren Colburn, G. F. Thayer, Wm. Russell, Harvey P. Peet, Wm. A. Alcott, Walter R. Johnson, Rev. Wilbur Fiske, John Kingsbury, Lowell Mason, George B. Emerson, Calvin E. Stowe, Samuel Lewis, Cyrus Peirce, Nicholas Tillinghast, Francis Dwight, D. P. Page, Wm. F. Phelps, John S. Hart, F. A. P. Barnard. We feel indebted to the publisher for issuing so valuable an educational work in such admirable style.

THE GRADED SCHOOL. A Graded Course of Instruction for Public Schools, with copious Practical Directions to Teachers, and Observations on Primary Schools, School-Discipline, School-Records, etc. By W. H. Wells, A.M., Superintendent of Public Schools, Chicago, and late Principal of the State Normal School at Westfield, Mass. A. S. Barnes & Burr, New York; Geo. Sherwood, Chicago.

We have looked for this book for some time, in the expectation, from our knowledge of the author, of what it proves on perusal to be, a very valuable work. It is the first book issued upon the subject of the American Graded School. There have been many excellent articles and addresses and school-reports which treated in whole or in part upon this subject; but Mr. Wells is, we believe, the first who has produced a book on the subject. No one interested in the subject of Graded Schools should be without it, as it affords many valuable hints. The Graded School is the cheapest, safest and best combination to effect a general education that has been devised. This book is particularly full upon that part of the subject which relates to the Course of Study. Teachers, send for the book.

QUACKENBOS'S ENGLISH GRAMMAR. New York: D. Appleton & Co. 1862. 12mo., 288 pages. Muslin. 63 cents.

We received this Grammar last month, but too late for notice. It is a good book, differing in some not very important matters from other good books on the same subject. The old terms to express the various modes, tenses, etc., are retained, the author not deeming it necessary, for the sake of making a *new book*, to call old things by new and, if any thing, less significant names. The only difference in this respect is that what other grammarians call *Neuter Gender* he calls *No Gender*. For a statement of the peculiar features of the work, and its special excellences as claimed by the author, the reader is referred to the advertisement in the September number of the *Teacher*. In externals — paper, typography, and binding — the publishers have left nothing to be desired: it is superior in these respects to most of our text-books. A single copy, for examination, will be sent by the publishers, by mail, post-paid, to any teacher remitting *thirty* cents.

CAMP'S HIGHER GEOGRAPHY. Prepared to accompany Mitchell's Series of Outline Maps, etc. By David N. Camp, Principal of the Connecticut State Normal School, and State Superintendent of Common Schools. O. D. Case & Co., Hartford; Geo. Sherwood, Chicago. 200 pages.

We expressed our opinion of this series of Geographies and Maps in a former number of the *Teacher*. The High-School Geography does not detract from the merits of the series. As far as our observation of books and maps has gone, we have come to the conclusion that there are none superior to these for use in the school-room.

Davies's Primary Arithmetic. Chicago: Geo. Sherwood. 108 pages.

A very pretty, attractive little book for beginners, and well illustrated. It is a mistake of some that Mental Arithmetic precedes Written in the natural order of studies. The abstract should never precede the concrete in children's text-books: the illustration should always precede the rule. This little book appeals to the eye, in the combination of numbers, as well as to the mind.

Official Circular. *Comments on the School-Law.* By Hon. Newton Bateman. Springfield, Ill., September, 1862. 88 pages octavo.

This is a new circular issued by the Superintendent upon questions arising and submitted to the Department since the publication of the last general circular. The matter and style of the comments commend them to the special attention of school-officers and teachers. The character of this circular, from the amount of study and legal investigation expended upon it by the Superintendent, is entirely reliable. Such expositions will save much time, trouble and litigation to school-officers and people. Those interested in school-matters should send for a copy.

The New-York Teacher.

This excellent educational journal is under the management of a Board of Editors selected by the State Teachers' Association. At the recent meeting of the Association some changes were made in the corps. We wish them welcome to the fraternity. James Cruikshank, of Albany, is the Publisher and Resident Editor, and the following compose the Board of Assistant-Editors: J. W. Bulkley, Brooklyn; N. A. Calkins, New York; D. H. Cochran, Albany; W. N. Reid, Newburgh; E. A. Charlton, Schenectady; D. S. Heffron, Utica; M. P. Cavert, Albany; W. W. Raymond, Skaneateles; E. A. Sheldon, Oswego; Edward Webster, Rochester; J. W. Barker, Lockport; John S. Fosdick, Buffalo; W. F. Phelps, Trenton, N.J.

Parson Brownlow's Book. *Sketches of the Rise, Progress and Decline of Secession;* with a Narrative of Personal Adventures among the Rebels. By W. G. Brownlow, Editor of the *Knoxville Whig.* G. W. Childs, Philad'a. Pp. 458. $1.25.

This is a most remarkable book, by a most remarkable man. We have perused it with much interest, inasmuch as it has been written by one who has had ample opportunities of knowing the condition of that whereof he speaks, from long observation and varied experience. It might safely be said of him, as ex-Governor Wise said when he and Mason were endeavoring in vain to intimidate Old John Brown, "He is the gamest man alive." The amount of courage and unflinching pertinacity displayed by this man in favor of the Stripes and Stars, under circumstances of terror and intimidation enough to crush ordinary men, commends him to our highest regard. It is no light thing to exhibit patriotism under such pressure.

But this book exposes a horrible condition of Southern life and character. A considerable portion of it is devoted to extracts from the *Knoxville Whig.* These extracts, both in their matter and their style, reveal much, not only of the peculiar manner and sentiments of their author, but of the character of the people by whom the *Whig* has been supported. Such a paper is not calculated to elevate or refine a people: it is coarse, rude and offensive in language and in style, and could be approved only by those of a similar character. The horrible condition of Southern Society, which Mr. Brownlow deplores so bitterly now, is just what he has in times past helped to make it. He has been a most ardent supporter of the American system of slavery — has spoken for it, written for it, and voted for it; and now he has lived to see the fruits of a system so full of horror — not especially to the black, the oppressed, but to the white, the oppressor. Mr. Jefferson has been proved to be correct when he attributed a greater injury, if possible, to the masters than to the slaves. Newspapers, books and *common schools* are almost unknown to the South — the last entirely so to any slave state except perhaps Missouri. No wonder that, under a system so prejudicial to the improvement of the people, the masses are ignorant, incapable of judging correctly on matters of state policy, and only fit to be made the cruel and irresponsible tools of designing demagogues.

But we forgive the Parson for his past errors, which have so much tended to keep the people of the South in selfish darkness, in consideration of his sufferings in behalf of the Union, and commend his book to the perusal of all our readers.

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[The Senior Editor of the *Teacher* has removed to Rock Island, Illinois, and requests that hereafter his Correspondence and Exchanges be addressed to that place. ALEX. M. GOW.]

ILLINOIS TEACHER.

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OBJECT-TEACHING:

ITS ORIGIN—USES—ABUSES.

BY W. H. WELLS.

No other subject is at the present time attracting so much attention among educators as *object-teaching*. It furnishes a theme for discussions and essays and lectures without number. Three years ago we had not a single original volume on object-teaching in this country. Now we have three or four new volumes in a year. And yet, notwithstanding all this lecturing, and discussing, and writing, and reading, there is at the present time no other department of instruction in which the views and the practice of teachers are so vague and unsettled as in this.

The system itself is as old as nature; and if the word *nature* had been incorporated in the name by which the system is designated in stead of the indefinite term *object*, it would have saved many excellent teachers from failing to comprehend the end to be sought, and wasting their time in aimless efforts.

The true idea of a philosophical system of object-teaching was first distinctly presented by Comenius,* a distinguished Austrian teacher, more than two hundred years ago.

About the beginning of the present century this system was still more fully presented and applied by the celebrated Swiss educator Pestalozzi. The labors of Pestalozzi attracted the attention of educators in all parts of Europe and in the United States. A valuable

* About the middle of the seventeenth century, Comenius was invited to this country to take the office of President of Harvard College, but declined the application. For an interesting sketch of his life and peregrinations, with copious extracts from his writings, see *Barnard's American Jour. of Educ.*, vol. v, pp. 257–298.

series of essays on the system of Pestalozzi was commenced in the *Academician*, an able educational journal published in New York, in January 1819, and continued in successive numbers through the year.

In the *Journal of Education*, published in Boston, from 1826 to 1830, and conducted by William Russell, the elocutionist, this system was very fully presented, and strongly recommended to teachers for their adoption. When the *Journal of Education* was succeeded by the *Annals of Education*, special attention was devoted to the subject by the editor, William C. Woodbridge, who had previously investigated the system very carefully during a protracted residence in Switzerland.

The American Institute of Instruction was organized in 1830, and one of the lectures in the first course* contained a beautiful and elaborate illustration of this system, so happily presented and so attractive that it is difficult to understand why it did not make a more lasting impression upon the intelligent body of teachers then assembled at the State-House in Boston.

After the discontinuance of the *Annals of Education*, the system of Pestalozzi was frequently alluded to and recommended in educational journals and educational conventions, but very little effort was made to secure its general introduction in schools for a period of more than twenty years.

Not so in England. There the system was introduced by Dr. Mayo, about forty years ago, and it has continued to flourish, with various modifications, to the present time.

But when at last American educators did awake to the importance of the subject, they moved with almost reckless haste, and they have accomplished in the last five or six years what would have been much better done if they had taken the lessons so well given by Picket, and Russell, and Woodbridge, and Carter, thirty years ago, and improved this lost period of a whole generation in maturing a truly philosophical system of *object-teaching* on the basis of *nature* and *common sense*.

Object-teaching without method, without some definite aim and purpose, is usually a mere waste of time. Hundreds of object-lessons are daily given without imparting to children a single new and valuable idea, or teaching them the correct use of a single new word.

Object-lessons should be so graduated and so presented as to impart a clear and definite understanding of the properties and relations of common things, and a ready and correct use of the best words that can be employed to express these properties and relations. They should embrace an accurate knowledge of principles directed to practical use.

* By J. G. Carter.

Next in importance to the prevalent fault of conducting *objectless object-lessons*, lessons without system or natural progression, is the error of attempting too much. What we need is to bring *popular philosophy*, the *common philosophy of common life*, into its appropriate place in the *common school*. In attempting to accomplish this object, many teachers run directly into *higher philosophy*, and bewilder their pupils, and often themselves, in a labyrinth of abstruse principles and technicalities, suited only to high schools and colleges. Many teachers have never learned that object-teaching, when philosophical principles are concerned, may be *thorough* without being *exhaustive*.

Another error, somewhat prevalent, is that of teaching the use of a large class of words derived from the Latin and other foreign languages, to the neglect of more valuable though less sounding words of Saxon origin. Each class of words should receive attention in proportion to its real value and use in the language. When it is found that a Saxon word is already understood, and the corresponding word derived from the Latin is in general use, then, of course, it will often be necessary to devote more time to the Latin word than to the Saxon.

The errors to which I have alluded are the natural fruit of the hasty and inconsiderate measures that have often been adopted to introduce object-teaching into schools. There is at the present time a large class of teachers who are not only attempting to give object-lessons to their pupils without any appreciation of the real object and use of the system or any special preparation for the work, but who have no idea that any special training or preparation is required. This gross abuse of the system by ignorant and unskillful teachers has by many been taken as an embodiment of the system itself; and a few prominent educators, failing to discriminate between the *use* and the *abuse* of the system, have condemned it altogether. There is, however, no reason to fear that it will suffer harm from this class of objections. It is already fully established in the confidence of the leading educators of the country, and the greatest danger, even now, is that teachers will continue to go too fast and too far in their attempts to introduce and apply it. It is quite time that the abuses of the system should be checked; and its healthy growth and progress require that it should be watched with vigilance and criticised unsparingly. It is time for teachers every where to learn that it is in reality *a system*, *a science*, and that its principles need to be studied and understood before they can be successfully applied. Let us then profit by our past errors, and welcome the closest scrutiny of our present and future labors; and let us persevere in our efforts to introduce improvements and remove defects,

till we succeed in establishing a system of instruction that is truly worthy of its origin and its mission.

It is not in the primary school alone that the system of object-teaching has its office to perform. There can be no safer guide than nature in the instruction of pupils of all ages and of every degree of attainment. Nor is this all. The course of study in our public schools is already sufficiently extended, and yet it is notorious that pupils leave school lamentably deficient on a great variety of subjects connected with a sound practical education. Just here it is that object-teaching, properly understood and applied, comes to our aid. A series of oral lessons, occupying ten or fifteen minutes a day, and extending through the common school course, is sufficient to embrace a wide range of practical exercises on common philosophy and common things.* These lessons afford just the variety and relaxation that are needed, at certain times in the day, to infuse fresh life and vigor in a school; and if rightly conducted, and made sufficiently brief, they will be found to aid rather than retard the progress of the pupils in other branches.

* "Children of both sexes should be exercised daily on some point of science or the arts, particularly in relation to ordinary life and common things."—David Stow, *Founder of Glasgow Normal Training Seminary.*

THE TEACHER IN A FIX.

In his chamber, musing sadly, sat a youth, his boots in air,
Both hands his aching head upholding, in his eyes a vacant stare,
And his frenzied mien betokened him the victim of despair,
While his nervous fingers traveled through his nice, pomatumed hair.
But the boots high in the air,
Or the fingers in the hair,
Could not change the vacant stare
Of this victim of despair.

Upward starting, from his reverie, peeped he in the closet, where
Just a few familiar spirits on a shelf were ranged with care,
When the boys came up together, just a social glass to share:
Tipped he one, and then another, but no solace found he there;
For the spirits, ranged with care,
Though of each he took a share,
Could not change the frenzied stare
Of this victim of despair.

What disturbs this nice young man? Whence this weight of woe and trouble?
Has the needful all skedaddled, in some great commercial bubble?

Has some fair one left him single, when his life he thought to double?
For 't is only cash and woman that make up life's joy and trouble.
'T was no lack of cash or fair
In his sorrows had a share,
Or had caused the frenzied stare
Of this victim of despair.

Was it that hard-hearted duns filled his manly soul with care?
Did his tailor, tired of waiting, now most solemnly declare
Till his bills were paid in full he should nothing have to wear?
'T was no want of coats or breeches that now filled him with despair:
He 'd at least a dozen pair,
And the waistcoats were most rare
That he sported, and young Toots
Never walked in tighter boots.

On a table near him lying was a modest little book,
Which this graduate of college, who had highest honors took,
Now regarded with deep sighs, and a puzzled, anxious look,
And, when he essayed to read it, all his calmness him forsook.
Then again he courage sought
From the spirits he had bought,
But confusion only wrought,
Till he seemed like one distraught.

As a teacher, he was deemed very wise and very good:
Metaphysics, mathematics, both of these he understood;
Greek and Latin he could teach, and he vowed he gladly would
Expound those Oral Exercises, if indeed he only could.
Could he? Echo answers "No":
This the cause of all his woe;
College learning is no go,—
To his grief he finds it so.

In the chambers of his brain, all his classic lore o'erturning,
He now finds, like many another, though too late comes his discerning,
That 't is *common sense* he needed, more than classic lore or learning,—
With these truths young minds to fill: "Why a lamp continues burning";
"How a bird flies through the air";
And to teach a goodly share
Of things common and things rare
To the pupils of his care.

O'er his brow a light is breaking, all its former gloom dispels;
In his ear a sprite is whispering, sweet the tale of joy she tells:
Other spirits now abjuring, a new hope his soul impels;
He will go and knowledge draw from the fountain of our Wells.

Chicago.

COMPOSITION-WRITING.—Number IX.

In our last it was advised when compositions should be read: it is our business now to inquire as to the method in which they may be criticised.

The plan pursued by some teachers is to call on the scholars to read their own performances, and then, taking the documents into their own magisterial hands, proceed to interline, erase, or make whatever improvement their acute cerebral functions may determine,—all on the spur of the occasion. This habit is not beneficial for either teacher or pupil: the former, in haste, may institute alterations which cooler judgment would not sanction; while the latter grows indignant at black outrages on his fair, pains-taking manuscript. It is better to have the essays handed in a day or two before they are to be read, so that Dominie Sampson at his leisure may thoroughly cogitate all the doubtful points, leaving no labor for the class but to declare, after the composition has been read, the results of such private criticism.

Before you do this, however, call on the other members of the class for the errors they may have noticed. They may observe inaccuracies too trifling to attract your own august attention: at any rate, they will give the reading more careful hearing if their comments are expected afterward. The patients themselves whose efforts are under dissection are often ingenuous enough to acknowledge mistakes committed during the writing.

In order that these criticisms may be duly pondered by the pupil, the composition should be rewritten; otherwise, if the scholars are naturally careless, the sheet will be tossed aside as soon as returned, and the corrections therein made at once forgotten. Where the errors are few and unimportant, especially in the case of attentive students, this requisition is laborious and unnecessary. In correcting compositions that are to be transcribed, it is better to indicate the inaccuracies indirectly than to point them out *literatim et verbatim*. Northend, in his *Teacher's Assistant*, gives the plan to which we allude: "Let it be understood that (1) placed opposite a line denotes an error in spelling; (2) an error in use of capital, or neglect of same; (3) the omission of a word, or a repetition; (4) false syntax; (5) a wrong word." This is certainly simple and positive. The scholar sees at a glance the number of mistakes committed, but is at the same time subjected to the process of discovering where they are.

Some times, with older pupils, whose faculty of discrimination is

nicer, we have appointed two from the class to criticise the efforts of the rest. Let them have the pieces a day before they are to be read, in order to make the examination carefully. It will tend to sharpen their literary delicacy. By this method, immediately after the reading of each composition by the pupil to whom it belongs, the student-critics will make their comments, and then pass the paper to your hands to receive the final touches of Addisonian elegance. W. W. D.

STERLING, October, 1862.

SUPERANNUATED TEACHERS.

Is teaching a profession, or is it not? This, to my mind, has become a 'vexed question'. On some accounts I am disposed to think that teaching is a profession. There is about the teacher a certain indefinable yet perfectly tangible and recognizable badge of office, never to be mistaken, be it met with in the Desert of Sahara or on the streets of Chicago. This pleasant little peculiarity we share in common with other learned and respectable professors. A Right-Reverend divine is not to be distinguished from the sinners of his flock by his 'cambric' alone, nor is it necessary to behold 'red-tops' in order to recognize the amiable arbitrators of our race. On this and other accounts I lean to the decision that teaching is a profession.

But again, if teaching be a profession, why is it that so few, so very few, enter it with any intention of remaining? In an evil moment the thought has been suggested to my mind (which, I beg leave to inform the fraternity, was repelled with proper indignation) that the occupation of a teacher is a way-station between studentship and the pulpit, the judge's bench, matrimony, etc., from which masculine and feminine Micawbers are continually about to make that *great start* in the world — which, however, is seldom made.

So, in truth, I am unable to decide whether teaching is a profession, a means to all professions, or an apology for no profession. But, be it the former, the latter, both, either, or all, I ask, in the name of all 'played-out' humanity, why has there never been founded an asylum for our unavailable members? This, to my mind, is a question of painful and growing importance — What is to become of superannuated teachers? In fact, what has become of them? I trust no one will for a moment suppose that I take a *personal* interest in this matter. Far from it. I assure the present company, and all who may in future

be interested in this question, that I am young, very young — as young, indeed, as was David Copperfield when he was walked over by the man on the stage-coach. I am actuated by no selfish motive, but by the true spirit of philanthropy, awakened by the manifest needs of some of my fellow laborers.

Again I ask what has, and what will, become of superannuated teachers when their valuable services are no longer needed by the Board? Do they become inmates of some quiet *retreat* for the insane? or do they go at the hour of sunset, a silent, dreamy company, on board 'that wonderful ship', and set sail in search of their 'possessions in Spain'? Who can answer? What is to become of us (a professional *us*, please observe)? I repeat it: What is to become of us when we are stranded, helpless and forlorn, on the shores of Time, after expending all our intellectual and physical vitality upon the youth of our day and generation? For I hold it to be but a popular delusion, enjoyed by the public in general and parents in particular, that every embryo Homer or Newton is furnished by Nature with a ready-made, independent set of ideas, and that the teacher's task is only to hunt up these 'jewels of the mind', polish and label them, and fit each in its proper niche in the cranium of the future philosopher or poet. It is all very well for the public at large to indulge in this pleasing theory; but you, O patient phalanx, you, who have dug deep into the mines of juvenile stupidity for gems of intellect that were never buried there,—you, I trust, will admit that Dame Nature some times neglects to put brains in the place where brains ought to be, and that when, after infinite pains, you have succeeded in instilling some of your own or some one else's ideas into the vacuum designed for that purpose, it is still as difficult as delightful a task to teach these same 'young ideas how to shoot', as you are in imminent danger of being annihilated some day by having discharged at you by these gallant young sportsmen such remarkable intellectual bullets as the following: 5 and 2 are 3; dogs walk on two legs; cats have horns, and cows are wild animals and live in the woods.

But pardon this digression: it was introduced to illustrate that well-known but *never-to-be-mentioned* fact that —— teachers do become superannuated. This being the case, will not some large-hearted philanthropists interest themselves in the fate of these unfortunates, and tell us what is to become of them, especially on our side of the house, in these war times, when there is little hope of being asked to go on that journey upon which no man starteth *alone*, and from which no *maiden* ever returns? M.

FOUND DEAD!

Found dead!
Loosened the silver cord,
Broken the golden bowl;
This winding-sheet of snow
Hath given peace, we know:
God rest her soul!

Found dead,
In the gray dawn, ere earth
Of life hath felt the stir!
How pinched her wrinkled face;
How little of life's grace
Is left to her!

Long since,
In childhood's early bloom,
She was beautiful, 't is said;
With brow like lilies, fair,
Shaded by wavy hair,
Queenly neck and head.

In Spring,
When all the air was filled
With the promises of Fall,
Love sought and found sweet rest
Upon her snowy breast,
Came without call.

He proved
False as the sweet Spring air;
Promise as lightly kept:
She heard his wedding-bell,
To her it was life's knell:
She could have slept.

She lived:
And peace, with fluttering wings,
Flew outward from her breast,
No more to form or face
To lend its witching grace
Of dreamy rest.

She lived!
O, it was pitiful,

Her crazy hermit-life!
Better an early grave
Than tossed of life's rough wave,
Helpless, 'mid strife!

Found dead!
'Mid sleet and blinding snow
She died: would we might say
That angels, 'mid the gloom,
Rolled from that torn heart's tomb
The stone away.

PRIMARY SCHOOLS.

THE history of the practical workings of our Primary Schools for the last ten years has demonstrated beyond question that the success or failure of any system of public schools depends mainly upon the manner in which the primary schools are conducted and the kind and quality of instruction given in them. In them the youth of our country lay the foundation of all subsequent moral and intellectual attainments, and form those habits which, in after life, shall prove like strong bands, which can not be broken. In them are implanted in their hearts all those noble and manly virtues which so beautify and adorn the moral and intellectual life, or those vices which so early wither and blast every germ of good in the unfolding soul-life within its clayey casket; and for these reasons this department should be watched with the greatest care, and none but the best teachers — those of the largest experience and highest culture — should be permitted to mould and form, to cultivate and develop, the moral, intellectual and spiritual life of those precious little germs of immortality that daily gather in the primary schools.

Errors committed in the primary education of the child require years for their correction — years of time which are to the child of inestimable value in an educational point of view, which are thus squandered by teachers who have neither taste, tact nor fitness for the fearfully-responsible work which they have undertaken to do, and who have engaged in it without ascertaining whether they were fitted by nature and education to perform this all-important work properly, or who have not the slightest appreciation of the true nature and application of the educational means and forces which must be in every

case applied to rightly unfold and develop, cultivate and strengthen, the mind of the pupil, but whose chief incentive to engage in this responsible work is the paltry sum which they receive for their labors.

The wide-spread practice of employing young teachers — nay, *young girls*,— of little or no experience, and oftentimes of less education (so far as a knowledge of the human mind is concerned, and of the forces and means to be used in rightly developing it) can not be too severely censured; and it is strange that school-boards and school-directors will not learn that it is a miserable and short-sighted economy to place cheap teachers, who have little or no culture or experience, in charge of primary schools. A thorough reform is needed in this respect, and whole-souled, noble-hearted and earnest-minded teachers alone can effect this great and all-important change in the primary schools. They must shape and elevate the popular mind until it cries 'Shame' on such short-sighted, narrow-minded and ruinous policy. A great change is needed in this direction among those who call themselves teachers, who have but little experience and a limited education, who deem it less honorable to teach in the primary than in the intermediate, grammar, or high school; and even among those who have a larger experience and higher intellectual culture, who rank as first-class teachers, are many who hold the same opinion, and who by word and deed tend to strengthen in the popular mind the opinion that it is really so.

The gravest error in most primary schools is the almost total neglect to cultivate and develop the perceptive faculties of the pupils. As the young mind can be reached only when the senses are used as a medium, it is all-important in primary instruction that the teaching be such as will directly appeal to them. For this reason, more than any other one, are object-teaching and oral lessons upon common things, etc., so much superior to the old and tortuous method of teaching the primary elements, in which words are without meaning to the undeveloped perceptions of the unhappy pupils. The former method, when applied to its fullest extent, by a thoroughly competent and loving teacher, will make every word and symbol glow with meaning, and make the primary school such a pleasant place that it will be a pleasure in stead of a task for young children to attend.

These schools should be only in pleasant and healthful buildings; and the practice of having them in basement stories can not be too severely reprehended. Primary rooms, above all others, should be the most attractive and the most tastefully and conveniently arranged. They should be free from all dampness and unwholesome vapors, and so situated that God's beautiful sunlight and pure air will carry life and health to every part of them. Their walls should be adorned with

such pictures and paintings as will speak to the child in a voice which it can never forget; and on every hand should be objects that will delight, interest, and instruct—such as leaves and flowers, fruits and grains, minerals, and the forms of the regular solids, measures of length, weight and surface, bulk and fluids, and cards showing the different shades of color,—and, in short, every object that will aid in arousing the dormant faculties of the young mind to activity and feeling. And be assured, O ye School-Boards and School-Directors that are *so economical*, that no investment which you can make with your 'school-moneys' will pay a larger or more profitable dividend than a few dollars invested in such appliances for your primary schools. It will pay, if in the hands of a competent teacher, even in these hard times. To such as have primary rooms whose walls are bare and cheerless, with none of the appliances mentioned to delight and interest, to instruct and elevate, the little ones who gather there, I would say make the experiment, and give us the result of it, one year hence, through the pages of the *Teacher*. M. V. B. S.

SCHOOL EXERCISES.

MICHIGAN QUESTIONS FOR THE EXAMINATION OF TEACHERS. BY J. M. GREGORY, STATE SUPERINTENDENT.

GRAMMAR.—1. Define the difference between a phrase and a sentence.

2. Give the classes of sentences, and an example of each class.

3. Describe the essential parts of a transitive sentence.

4. Name the divisions of Grammar.

5. What does syntax comprise?

6. Write a sentence that contains all the parts of speech, or kinds of words.

7. What is the difference between a personal and a relative pronoun?

8. Give the principal parts and the participles of the following verbs: Be, Go, Set, Sit, Lay, Lie, Write, See.

9. Parse the following sentence: The man whom I shall trust must have shown himself worthy of confidence.

10. Correct the following: I knew it was him. Neither John nor James were there. Who did you find there?

N.B. Errors in the grammar of any of the answers will be taken into account.

GEOGRAPHY.—1. What does Geography comprise?

2. What are the divisions of land?

3. Define latitude and longitude.

4. Name and describe the lines by which latitude and longitude are determined on maps.

5. What are the topics of Physical Geography?

6. Name the Zones, and give their limits.

7. Name ten of the principal rivers of North America.

8. Name the Southern States, and their capitals.

9. What countries are embraced in the British Empire?

10. Name the animals and vegetables peculiar to the Temperate Zone.

ARITHMETIC.—1. Define a fraction and its terms.

2. Define prime and composite numbers.

3. How may a vulgar fraction be changed to a decimal?

4. Change .0125 to a vulgar fraction.

5. Define reduction, ascending and descending.

6. What is the interest on $35 for 35 days at 7 per cent.?

7. Define the mathematical terms *root* and *power*.

8. Extract the square root of 9025.

9. Reduce $\frac{1}{4}$, $\frac{3}{7}$, $\frac{2}{5}$, $\frac{3}{8}$, $\frac{5}{12}$, to a common denominator.

10. What is the value of $\frac{3}{7}$ of a pound troy?

ORTHOGRAPHY.—1. Define derivative and primitive words.

2. Form and define words ending in the following suffixes: ing, ment, full, less, or, en, er, ist.

3. Form and define words with these prefixes: ad, con, in, un, pre, inter, sub, post, dis, circum.

N.B. The orthography will be judged by the spelling in all the answers.

READING.—1. What is emphasis?

2. Mark the words which are emphatic in the following sentence: Whatsoever ye would that men should do to you, do ye even so to them.

3. What is the rising inflection, and in what case is it generally used?

4. Give a sentence in which a circumflex inflection should be used.

5. Give the classes of elementary sounds.

6. Separate into their classes the letters in the following: Your size and weight largely exceed those of your brother.

SPELLING.—[Twenty words used this fall by J. F. Eberhart, School Commissioner of Cook county, at institutes, and in the examination of teachers.]

Syllable, Receive, Intelligent, Separate, Believe, Moneys, Valleys, Judgment, Descend, Irresistible, Abridgment, Irrevocable, Caricature, Chrysalis, Crystal, Opportunity, Stationery, Immolate, Conscientious, Tenacious.

COMPOSITION.—[We find in the *Massachusetts Teacher* the following letter, which it is suggested teachers write upon the blackboard and require their pupils to reproduce it in approved style, and accurately. We tried it, and do not feel like saying much about the result.]

boston aug 13 1862 a d smith jr esq dear sir yours of the 6th inst has been received please send by hill & cos express 10 doz lemons 20 lbs sugar and 1 lb tea lieut geo c jones of co b 5th reg was not as reported killed at culpepper va i am as ever yrs truly c t howe

[Also the following inscription, from the writer's stove, which is all cast in capitals, is accurately spelled, but contains in punctuation at least ten obvious mistakes.]

Adams & Jefferson, No 2. Made by, D & N F Co. Boston Mass. Pat,d May, 29 1855

The inscription on our own stove ("Golden Rose N° 4 Patented 1853 Johnston. Farnsworth & Co Chicago. Ill.") is but little less faulty than the other.

Try the letter and the inscriptions, teachers, and see what your scholars will do with them.

PHYSICAL EXERCISES.—[The following series of twenty movements, making a single exercise, was devised by Miss Annie E. Trimmingham, Principal of the Primary Department of the Jones School, Chicago. They are excellent for small children, and are to be rapidly called off by number.]

1. Arms folded behind.
2. Arms folded in front.
3. Arms akimbo.
4. Hands on the shoulders.
5. Right hand out.
6. Left hand out.
7. Both hands out.
8. Right hand on the head.
9. Both hands on the head.
10. Whirl hands.
11. Hands forward perpendicularly.
12. Hands backward perpendicularly.
13. Hands out at full length: clap three times.
14. Hands crossed over the head.
15. Arms at sides, hands horizontal, wrists bent.
16. Both hands to the right.
17. Both hands to the left.
18. Arms arched over the head.
19. Turn once in the last position.
20. Arms folded behind.

THE ROMANCE OF THE SWAN'S NEST.

LITTLE ELLIE sits alone
'Mid the bushes of a meadow,
By a stream-side on the grass;
And the trees are showering down
Doubles of their leaves, in shadow,
On her shining hair and face.

She has thrown her bonnet by,
And her feet she has been dipping
In the shallow water's flow;
Now she holds them nakedly
In her hands, all sleek and dripping,
While she rocketh to and fro.

Little Ellie sits alone,—
And the smile she softly useth
Fills the sentence like a speech,
While she thinks what shall be done,
And the sweetest pleasure chooseth,
For her future, within reach.

Little Ellie in her smile
Chooseth—"I will have a lover,
Riding on a steed of steeds!
He shall love me without guile;
And to *him* I will discover
That swan's nest among the reeds.

"And the steed shall be a red-roan,
And the lover shall be noble,
With an eye that takes the breath;
And the lute he plays upon
Shall strike ladies into trouble,
As his sword strikes men to death.

"And the steed it shall be shod
All in silver, housed in azure,
And the mane shall swim the wind!
And the hoofs along the sod
Shall flash onward in a pleasure,
Till the shepherds look behind.

"But my lover will not prize
All the glory that he rides in:
When he gazes in my face,
He will say—'O love, thine eyes

Build the shrine my soul abides in;
And I kneel here for thy grace!'

"Then, aye then, he shall kneel low,
With the red-roan steed anear him,
Which shall seem to understand,
Till I answer—'Rise, and go!'
For the world must love and fear him
Whom I gift with heart and hand.

"Then he will arise so pale,
I shall feel my own lips tremble
With a *yes* I must not say:
Nathless, maiden brave, 'Farewell'
I will utter, and dissemble—
'Light to-morrow with to-day.'

"Then he will ride through the hills,
To the wide world past the river,
There to put away all wrong!
To make straight distorted wills,
And to empty the broad quiver
Which the wicked bear along.

"Three times shall a young foot-page
Swim the stream and climb the mountain,
And kneel down beside my feet—
'Lo, my master sends this gage,
Lady, for thy pity counting:
What wilt thou exchange for it?'

"And the first time I will send
A white rose-bud for a guerdon;
And the second time a glove!
But the third time—I may bend
From my pride and answer—'Pardon,
If he comes to take my love.'"

Pushing through the elm-tree copse,
Winding by the stream light-hearted,
Where the osier pathway leads—
Past the boughs she stoops—and stops!
Lo, the wild swan had deserted,
And a rat had gnawed the reeds!

Ellie went home sad and slow!
If she found the lover ever,
With his red-roan steed of steeds,
Sooth, I know not! but I know
She could show him never—never—
That swan's nest among the reeds. ELIZABETH BARRETT BROWNING.

LITERATURE FOR CHILDREN.

Most of the reading provided for children consists of stories. Some of these are good and useful, but others are hurtful. A considerable part of the juvenile reading-books is made up of fancy tales, accounts of strange adventures, real or fanciful, and stories of ghosts, giants, and magicians. Such stories are attractive to children, and are read with intense interest, mingled some times with wonder and fear, and some times with mirthful pleasure. If immediate gratification were the chief end to be secured, these books would be just the ones. They answer *that* purpose fully.

But we can not test the true value of books thus. A child's reading will leave its influence upon his mind after the immediate pleasure has passed; and in estimating the value of books we must judge by their permanent influence rather than by their present effects. The kind of reading described above seems to me to be very injurious. It gratifies the child without instructing him. It does not draw out the thinking powers, and encourage intellectual effort. It makes the mind indolent and morbid, and creates a distaste for useful books. The child becomes accustomed to read for amusement or excitement, and simple, truthful and instructive literature seems to him dull and tedious. When this vitiated taste is formed it will strengthen itself by repeated gratifications until the story-loving child becomes a slave to it, and spends every available moment in devouring works of fiction. Such seem to me to be the direct results of these juvenile books, and, if so, every parent or teacher who provides such books for children is fostering a taste for fictitious reading. I do not here intend to condemn fiction unqualifiedly. It may at times be of use to those whose tastes are formed; but it does not seem to be desirable as a moulding influence in childhood.

Books for children should be such as will be of benefit to them while they read, and ever after. The style should be agreeable, so as to interest the child, and the subject-matter should be instructive and strengthening to the mind. The subjects should be varied so as to appeal to the intellect, conscience, and heart. Is not the field of truth broad and diversified enough to satisfy the wants of any mind? There are the phenomena of day and night, and the succession of the seasons — the tetrarchs of the year; the varieties of beasts, birds, and fishes, with their peculiar habits and modes of life, and relations to man; the beauties of flowers and trees, and the majesty of forests;

the delicate forms of vegetable and insect life which the microscope reveals; the mysterious forces of nature, and the sublimity of the 'blue and starry sky'. The field of history is also rich in lessons that will interest and benefit any child. The material is abundant, and can easily be made attractive to young minds. Above all, there is the realm of spiritual truth revealed in the Holy Scriptures. There are beautiful biographies, noble examples of faith and love, and the teachings of heavenly wisdom. Is there not enough in nature, history, and revelation, to fill the reading-books of the young? Is there any beauty of the mind that can not be gratified and cultivated from these sources? Why should these healthful and inexhaustible fountains be neglected, and the exciting draughts of fiction be given to the immature? The imagination can be amply developed without such stimulus, and much more healthfully. The world is full of beauties which can be admired in nature, and imitated in art. Music offers its delights. Poetry and painting, and all natural or artistic beauties, spread out their charms and invite the soul to enjoy them. All these are salutary. There is no deficiency in the supply of healthful nourishment and gratification that needs to be made up by hurtful fiction. God has furnished all that men need.

Iowa Instructor.

LEARN EVERY THING, BUT KNOW NOTHING.

It may be said emphatically that this is an age when children learn every thing, but know nothing. This is especially true of young girls. The fashionable seminaries for the education of the future wives and mothers of the republic usually undertake, with the most self-complacent absurdity, to instruct their pupils in every thing, from French to embroidery, from geology to music. A young lady in this age of progress is not considered to be making any advances at all in education unless she is studying at one and the same time the harp and piano, German and Italian, crotchet work and fashionable netting, drawing and dancing, the art of composition and the art of making a courtesy, physiology and painting, algebra and astronomy, with natural philosophy in all its branches, and artificial manners in all their conventionalities. As a consequence, the rising generation of young females exhibits myriads of smatterers, but very few thoroughly educated women. The fair students almost invariably forget to-day what

they were taught yesterday. Undertaking to learn too much, they end by learning nothing. Even what is acquired is held only superficially. And what is true of young girls is true also of boys, though we are glad to say not in so great a degree.

It is the fault of modern academies generally to attempt to teach too much. The popular notion that the more studies a pupil has the better must be his education is radically wrong: and yet instructors who know better, in order to make their schools flourishing ones, truckle to this idea. But a good education depends less on the number of branches studied than on the thoroughness with which a few are mastered. Far be it from the *Ledger* to say that a child should remain in ignorance of geography, arithmetic, spelling, history, or other necessary branches. This is not what we mean. What we do mean is that our children should be taught these fundamental studies thoroughly before they are carried forward to others of less importance, or instructed in what are merely accomplishments. We maintain that the woman who writes and speaks her own language correctly has a more finished education than she who can not spell common English words, though she may jabber bad French. We assert that the boy who has mastered one thing thoroughly, whether it be the mathematics, the humanities, or the idioms and structure of his native tongue, stands a better chance to succeed in life than he who can conjugate in a dozen languages, dead or living, and is therefore no proficient in either, or in his own.

We once knew an old lawyer who, when a new student presented himself, put Blackstone into the young man's hands. "Read that for a year," he was accustomed to say, "and then I'll give you something else." To spend a year over a single treatise, comprised in but four volumes, seemed at first a useless waste of time. The student, if a quick reader, had generally finished the book in a month. But the preceptor was invariably inexorable. "You think you know it, do you?" he would say sarcastically. "Well, what is the rule in Shelly's case?" Perhaps the youth had been fortunate enough to notice and remember the abstruse distinction taken on that famous trial. But, even if he had, the old lawyer was sure to trip him up in five minutes on something else. Back to Blackstone the student went, at last aware of his deficiencies, and read and noted and analyzed, for perhaps a couple of months more. Then he returned to the old story, that there was nothing left to be learned. But the thorough old common-law advocate soon caught him again. When Blackstone was finished at last, it was finished, as it were, for life. Every line almost was fixed for ever in the student's mind. He could look back men-

tally over the four volumes as a spectator gazes from a mountain-top over a wide champaign country spread beneath him, and map out the whole without a single omission or blunder. He had a life-long clue to the labyrinth.

The old lawyer's plan of teaching law is the only correct plan of teaching any thing. Boys or girls educated on a similar thorough system at least know what they are talking about when they talk at all. They have acquired discipline of mind, and clear ideas with it. If they undertake to write, they write sensibly and correctly. If they converse, they speak to the point. If they are called, in the duties of life, to decide in some novel combination of circumstances, they think accurately, because they know immediately where to look for the keystone of the problem. The vast field of knowledge is no longer a labyrinth to them, for they hold the clue to it in a disciplined mind and a capacity to study properly. It is never difficult to recognize such persons, even in a five-minutes conversation. They are distinguishable at a glance from those imperfectly educated individuals of either sex who, to use a simile of Lord Bolingbroke, rattle on as meaninglessly as alarm-clocks that have been sprung prematurely.

Philadelphia Ledger.

DOES THE MISSISSIPPI FLOW UP HILL?

At a late meeting of the Teachers' Association of the town of Johnstown, an opinion was delivered by one of the savans maintaining the affirmative of the above proposition, and embracing the following points:

First, the terms up and down are used in relation to the distance of places from the centre of the earth. Second, the earth being an oblate spheroid, any point north or south of the equator is nearer the centre of the earth than any place on the equator. Third, the head of the Mississippi river (Lake Itasca) is situated some 2000 miles north of its mouth. Therefore, as a conclusion deduced from the first two propositions, the river must in its course flow up hill, and that too a number of miles. The reason assigned for this apparent anomaly is the motion of the earth on its axis, and a consequent continual tendency of matter to flow from the poles to the equator.

On being asked why the course of the St. Lawrence is not similarly

affected, the reply was "Because the banks of that stream hold the water in." Will the editor of the *Scientific American* please oblige the readers of his valuable paper in this locality by giving his opinion upon this subject? A. B.

[This is a mere dispute about the meaning of words. Up and down are not ordinarily used to express the distance of bodies from the centre of the earth, but their relative distance above or below the level of the sea. The level of the sea is determined mainly by the balance between the centrifugal force resulting from the earth's rotation, and the power of the earth's gravitation. These two forces give the earth its form of an oblate spheroid, causing the surface at the equator to be thirteen miles farther from the centre than the surface at the poles. When water is raised above this surface the balance of the centrifugal force and gravity causes it to descend to the surface. Though the Mississippi at its mouth is some miles farther from the centre of the earth than at its source, it does not flow up hill. Still, if any one chooses to say that it does, the assertion raises a question for lexicographers only; there is no difference of opinion in relation to the facts.—EDS.] Scientific American.

SCHOOL DISCIPLINE.

IT is not right to regard any sort of discipline as a convenient or even a necessary *help* to education. It is itself the great educational process. A well-disciplined mind is a well-educated mind, whether it has much knowledge or little; and the mind that is not disciplined is not educated, though it be familiar with the whole route from A to Astronomy.

The true business, then, of the teacher is that of discipline. The wild colt of the prairies is unfit for gentle uses, but he may be brought to drag the plow or to be driven by a child. He needs to be tamed, but receives no new powers. The child that is to be the future citizen or lawgiver, with all his wild, untamed impulses, mental and moral, comes to the teacher. He comes to be disciplined.

The popular idea of school discipline has reference to the whole apparatus of requisitions and prohibitions, restraints and stimulants, which are designed to regulate the pupil's habits of study and deportment. Let us consider for the present this application of the subject, guided by the preceding observations. Among the many evils which teachers commonly seek to prevent, such as the following are promi-

nent: Absence and tardiness, idleness, whispering, all disorderly movements in the school-room, injury to any school property by marking, cutting, defiling, etc., rudeness of speech or act in school intercourse, or in passing to and from school, vulgarity, profanity, every form of incipient rowdyism, etc., etc.

Among the objects to be secured, some of which are implied by their opposites just named, are regularity of attendance, promptness in every duty, unquestioning obedience, truthfulness and conscientiousness, earnestness, diligence, thorough preparation of lessons, neatness in dress and school-room habits, the 'golden rule' as the rule of intercourse with companions and teachers, etc. These lists of school virtues and vices might be much enlarged; but, at least, those named should be watchfully cared for by every teacher in his system of discipline. And this, be it remembered, not so much to promote the business of the school-room as because of the certain shaping those daily school-room habits, whether good or bad, are to have of individual character and destiny for this world and the next.

A system of discipline *ought to accomplish completely the object it aims at.* It should have no rules that have not been well considered beforehand. It should then admit of *no* exceptions but for the most indispensable reasons. Let down the bars to-day, and scholars will leap the fences to-morrow, and snap their fingers at all barriers the day after. The system while it lasts must be inflexible, earnest, strong, thorough. It is much easier to govern perfectly than partially, to say nothing of the clear gain in temper and comfort. Whatever is worth doing at all is worth doing thoroughly. If an evil ought to be prevented, let the teacher deliberate *and then prevent it.* He can do it if he will. He must be patient but determined. If any positive advancement is to be made, the matter should be well considered, then let the teacher will and act like a Napoleon. A *good school discipline is characterized by energy and efficiency.*

Government should be equable and uniform, not fitful and capricious. Scholars should know upon what they may rely. They will acquiesce more cheerfully in a rule if it is constant than if it is only executed occasionally. Habits of obedience make obedience easier to render and secure. It is moreover unjust to pupils to enforce a regulation with strictness at one time which laxity at another has led them to believe may safely be disregarded. Any scheme of discipline to be successful must be sure to embrace details, the *'little things'* of school life. It is utterly impossible to bring a community of children into a happy and healthy state of discipline, or to keep them there, without the most vigorous attention to those innumerable little acts and ways which betray the disposition and tendencies. If

a boy who walks or sits in your room in a swaggering or careless manner, he is sure to be equally careless in his conduct in more material respects. And if by any amount of patient culture you can establish *the principle and habit of doing every little thing in the very best way*, you may be unconcerned about his great lines of conduct. The boy is safe. If a young miss is pert or rude in speech or manner, *there is a counterpart within;* and if you regard with indifference these slight but true glimpses of the soul within, there may be much to regret at a future day. Tones of voice, carelessness in pronunciation and phraseology, coarseness and uncouthness of language, untidiness of dress, gait, attitude, etc., have the sound of 'little things'. But they are each signs and symptoms, and with certain index point out the path into the future. More than this. If a pupil commits a trifling breach of decorum, he thereby strengthens the impulse that prompted it, and creates a probability of greater misdoing. Let the teacher strictly take care of all the 'little things' in his establishment, and the greater ones will take care of themselves. This is because the former beget the latter. It has always been so. The oak comes from the acorn, the ocean from the little streams that trickle from out the rocks of the mountain; this heavy pall of sorrow and death that overspreads our world, from that 'little act' in the garden. 'Little things' are important things. There is a divinity in them. We have at times been so strongly 'exercised' concerning the importance of giving more earnest heed to this subject that we much fear we shall have to deliver ourselves of an article upon it. So enough for the present.

C., in Conn. Com. School Jour.

SYMPATHY WITH CHILDREN.

One of the great secrets of success in managing the young is sympathy with them as children. Nothing but this will lead to a proper understanding and appreciation of the motives by which they are governed, or enable us rightly to estimate the efforts they make for improvement. The following indicates that the writer had taken one valuable lesson as a teacher:

"At one period of my life, when instructing two or three young people to write, I found them, as I thought, unusually stupid. I happened about this time to look over the contents of an old copy-book, written by me when I was a boy. The thick up-strokes, the crooked down-strokes, the awkward joining of the letters, and the blots in the

books, made me completely ashamed of myself, and I could at that moment have burned the book in the fire. The worse, however, I thought of myself, the better I thought of my backward scholars; I was cured of my unreasonable expectations, and became in future doubly patient and forbearing. In teaching youth, remember that you once were young; and in reproving their youthful errors, endeavor to call to mind your own."

It was as true of us as of Paul that when we were children we *spoke*, *understood*, and *thought*, as children; it will be true of all other children. If, then, we would influence them, would control them entirely, we must remember that they are *children*.

The young act from *impulse* rather than *reflection;* many of their acts, troublesome though they may be, and apparently designed to annoy us, are merely the result of momentary impulse — entirely harmless in itself, acted out not from deliberate intention, but merely from the absence of that consideration or reflection from which alone self-control results. A child whispers to a seat-mate or class-mate because he happens to think of something too good not to be told. The boy, full of life, with healthful blood coursing through his frame, does not sing or whistle, 'it whistles itself'. A child often laughs because it sees something really laughable. Who of us has not felt an irresistible inclination to do the same, even under circumstances in themselves the most solemn?

Happy is the teacher who can really enter into the feelings and motives of childhood; and fortunate is the teacher who can discriminate between the apparently wrong actions which are caused by such sudden impulses, and those which are the result of deliberate intention to do wrong. Such a teacher will be willing to receive with a good grace the frank statement by the scholar of the real cause which prompted the act; and while he receives the statement in a proper spirit, as did the one who was told by the boy who had laughed during the devotional exercises

> "I saw a mouse in time of prayers
> Come down the rope for want of stairs,"

he will rise, rather than sink, in the estimation of the scholar and the school.

True, the things here spoken of must not be allowed to pass without rebuke, but the measure of reprehension must be proportioned to their real character; and it is the clear perception of what is required, and the just discrimination shown, which marks the true teacher, which commands the confidence and the *respect* as well as the esteem of scholars.

A. D. L., in Ohio Jour. of Educ.

MATHEMATICAL.

SOLUTIONS.—XXV. "What is the 0 power of a?"

$\frac{5}{5}=1$; $\frac{a}{a}=1$; $\frac{a^2}{a^2}=1$. $\frac{a^5}{a^2}=a^3$; $\frac{a^2}{a^2}=a^{2-2}=a^0$. $\frac{a^n}{a^n}=1$; $\frac{a^n}{a^n}=a^{n-n}=a^0$. $\therefore a^0=1$. $a^3, a^2, a^1, a^0, a^{-1}, a^{-2}, a^{-3}=a^3, a^2, a, 1, \frac{1}{a}, \frac{1}{a^2}, \frac{1}{a^3}$

If $a>1$ the series is decreasing; if $a<1$ the series is increasing. Z. T.

XXVIII. By second condition, the difference at first must be 4: then by the first, since John wins 2 from James, the difference is doubled. Then by first condition 8 must be $\frac{2}{3}$ of what John has after winning 2 from James. Since 8 is $\frac{2}{3}$, $\frac{1}{3}$ of 8, or 4, must be $\frac{1}{3}$, of what John has after he wins 2 from James; 3 times $\frac{1}{3}$, or 4,=12, what John then had. Then 12—2=10, what he had at first. 10—4=6, what James had at first. M. V. B. S.

XXIX. By conditions of problem we find that he must pay for as many as that number which when divided by 2, 3, 4, 5, or 6, leaves 1 remainder, and when divided by 7 leaves no remainder. Hence the product of those numbers + 1 will be the number of eggs he must pay for. $2\times3\times4\times5\times6+1=721$. M. V. B. S.

[M. V. B. S. is not quite correct when he says the rowdy must pay for as many eggs as the product of $2\times3\times4\times5\times6+1$. The number of eggs must evidently be such a number as is a multiple of 7, and diminished by 1 is a common multiple of 2, 3, 4, 5, and 6. The least common multiple of these numbers is 60; but 60+1 is not a multiple of 7, neither is $2\times60+1$, nor $3\times60+1$, nor $4\times60+1$. We find, however, that $5\times60+1$,=301, fulfills the conditions of the question. By inspection of the manner of obtaining this result we can readily see that a series of numbers in arithmetical progression may be obtained, all of which will answer the conditions of the question, of which the first term is 301, and the common difference the least common multiple of 2, 3, 4, 5, 6, and 7,=420. The second term is therefore 301+420=721, the result obtained by M. V. B. S.; the third term, 1141, etc.—ED.]

Z. T. sends a solution of a problem which he says was published in the *Teacher* a few months since. We have hunted over our files for the last three years without finding it, and desisted because we thought if published before that time it would scarcely interest our present readers. If Z. T. will have the kindness to put our finger on the page, we will publish his solution. ED.

PROBLEMS.—XXX. A cooper, having a cask 50 inches long and 36 inches bung-diameter, made another which would hold just *twice* as much. Required, the bung-diameter and the length of the cask.

M. V. B. S.

XXXI. The longest diagonal of a cube is a: What is the side?

J. W. O.

THE DISCUSSION ON THE CENTRE-OF-GRAVITY PROBLEM (*pp.* 116 *and* 342).—Z. TRUESDEL sends another solution of this problem, premised by the statement that J. W. O.'s solution is "a mere assumption of the answer, and a proof of its correctness." Our own opinion is that J. W. O.'s solution is liable to this objection; but we think Mr. Truesdel has fallen into the same error when he says "Since the weight of the pole is uniform, the centre of gravity of EB is at its centre F, *which is* 12 *feet from H.*"

Concerning the criticism on J. W. O. in the September number we quote:

"Mr. Wood is peculiarly unfortunate in his *explanation of* PRINCIPLES. He says 'If the bar is placed 8 feet from the centre, it supports $\frac{1}{2}\frac{6}{4}$, or $\frac{2}{3}$, of the whole stick.' Now this statement is not in accordance with well-known principles of Natural Philosophy. It is evident that C and D, being 4 feet from A, will carry 8 feet of the stick, independent of B. But the centre of gravity of the remaining 16 feet is at its centre, 8 feet from B. Now B, being only 8 feet from the centre of weight, will carry more of the 16 feet than C and D, who are 12 feet from the centre of gravity, and will therefore carry more than $\frac{1}{3}$ of the whole stick. If Mr. Wood will weigh a bar of iron 24 inches long, he will find that HIS *principles* do not agree with his practice. 'How necessary it is, then, for us always to be correct.'"

From J. W. O. we have the following:

"J. P. Wood makes a sad mistake in his effort to correct me. I claim that my solution is correct, and will try to make it so appear. Let us suppose the bar to be borne by two men placed at A and B: each will then bear an equal weight, for the centre of gravity lies at the centre of the bar and is equally distant from each. The effect on A and B is the same as if the whole weight were taken from the bar and concentrated at the centre of gravity. If either one places his shoulder beneath the centre of gravity, he takes the whole load.

"Suppose, for the sake of varying the example without changing the principle, that the bar is 24 inches long, weighs 24 pounds, is to be supported by two hands, one taking hold of the extremity of the

bar and the other at such a point that it will carry $\frac{2}{3}$ of the weight, which point we are to determine. Since one is to bear $\frac{1}{3}$ and the other $\frac{2}{3}$ of the load, their distances from the centre of gravity, E, must therefore be inversely as the weight they have to carry, or 2 to 1. The centre of gravity being the centre of the bar, the hand at the extremity of the bar is 12 inches from the centre of gravity, and, by the inverse proportion, the other must be $\frac{1}{2}$ that distance, or 6 inches, from it, which is 6 inches from the end, and corresponds to my solution in the August number.

"To illustrate this under another form: the hand at H supports entirely the projecting portion AH (3 inches) of the bar, and an equal length HE on the opposite side to balance it; that is, the bar might be cut at E and it would still be supported. Of the remainder EB (12 inches) the weight is distributed between the two hands in the inverse proportion of their distances from the centre of gravity F. F is at the centre of EB, 6 inches from B and 12 inches from H. The hand at B therefore bears $\frac{12}{18}=\frac{2}{3}$ of EB, and the hand at H bears $\frac{1}{3}$ of EB. As further proof: the bar weighs 24lbs., or 1lb. to the inch. The hand at H bears the whole of AH (6 inches) 6lbs., HE (6 inches) 6lbs., $\frac{1}{3}$ of EB (4 inches) 4lbs.—total, 16lbs.; the hand at B bears $\frac{2}{3}$ of EB (8 inches) 8lbs.

"To apply this reasoning to our original example: since the men at the bar are to carry twice as much as the man at the end, their distance from the centre of gravity must be one-half as great as his distance. His being 12 feet, theirs must be 6 feet from the centre, which is also 6 feet from the end.—Q. E. D.

"Let us correct Mr. Wood's solution. If the bar is placed at the centre, it supports, of course, the whole stick; if 1 foot from the centre, the man at the end, being 12 feet, will carry only $\frac{1}{12}$ as much as the two who are 1 foot from the centre, or the bar supports, and they will carry 12 *parts* of the stick to his 1, or $\frac{12}{13}$ and $\frac{1}{13}$; if 2 feet from the centre, the distances being 2 and 12, they carry $\frac{12}{14}$ and he $\frac{2}{14}$; if 3 feet, they $\frac{12}{15}$, he $\frac{3}{15}$; if 4 feet, they $\frac{12}{16}$, he $\frac{4}{16}$; if 5 feet, they $\frac{12}{17}$, he $\frac{5}{17}$; if 6 feet, they $\frac{12}{18}$, he $\frac{6}{18}$, which corresponds with my solution; if 7 feet, they $\frac{12}{19}$, he $\frac{7}{19}$; if 8 feet, they $\frac{12}{20}$, he $\frac{8}{20}$; if 9 feet, they $\frac{12}{21}$, he $\frac{9}{21}$; if 10 feet, they $\frac{12}{22}$, he $\frac{10}{22}$; if 11 feet, they $\frac{12}{23}$, he $\frac{11}{23}$; if 12 feet, they $\frac{12}{24}$, he $\frac{12}{24}$; which last statement merely is that if they are at one end and he is at the other, they will carry one-half the stick and he the other, which is plain to all. Truly, Mr. Editor, 'how necessary it is for us always to be correct.'

"M. V. B. S. asks if I clearly showed in what in division of fractions the convenience of the inversion consists. Merely in arranging the numbers to be multiplied together on the same horizontal line, to avoid the chance of multiplying the wrong numbers. I thought this was evident. J. W. O."

EDITOR'S TABLE.

EDITOR'S CHAIR.

THE STATE MEETING THIS YEAR AT ROCKFORD.— We expected to be able to publish in this number of the *Teacher* a report of the progress made by the Executive Committee toward forming a programme for the next meeting of the Association.

We learn, however, by letter from Mr. Alex. Kerr, that his brother, Mr. J. B. Kerr, who was Chairman of the Committee, made no arrangements for the meeting before going into the army. The other members of the committee, Messrs. Haskell and Heslet, are also in their country's service, and a new committee must be appointed.

Where is President Baker? One of his former pupils informed us a day or two since that he also had enlisted, as Chaplain of one of our regiments. If this is not the case, shall we not hear from him at once?

We must have the meeting at any rate. Mr. Alex. Kerr, who succeeds his brother as School Commissioner of Winnebago county, stands ready to do what he can; and if all the rest of the officers have enlisted, there still remain Roots, of Tamaroa; Clark, of Springfield, who was Chairman of the Committee of the Quincy meeting; and White, of Chicago; any one of whom we would dare trust to make up the programme.

Wake up, President Baker. Where are you? B.

[We have reliable information that Mr. Baker *has* entered the army as above stated.— N.]

A WORD TO THE BOYS.— When the Duke of Wellington was sick, the last thing he took was a little tea. On his servant's handing it to him in a saucer, and asking if he would have it, the Duke replied, "Yes, if you please." These were his last words. How much kindness and courtesy is expressed by them. He who had commanded the greatest armies in Europe, and was long accustomed to the tone of authority, did not despise or overlook the small courtesies of life. Ah, how many boys *do!* What a rude tone of command they often use to their little brothers and sisters, and some times to their mothers. They *order so.* This is ill-bred and unchristian, and shows a coarse nature and hard heart. In all your home talk, remember 'If you please'. Among your playmates, don't forget 'If you please'. To all who wait upon or serve you, believe that 'If you please' will make you better served than all the cross or ordering words in the whole dictionary. Don't forget three little words, '*If you please*'. Godey's Lady's Book.

OUR ADVERTISING SHEET.— Our readers will find in this number of the *Teacher* new advertisements from Harper & Brothers, G. & C. Merriam, Horace Waters, and the Ætna Life Insurance Company; to all which, as well as to those that do now appear for the first time, we invite their special attention.

LOCAL INTELLIGENCE.

CHICAGO.— The Chicago schools reöpened September 1, after a vacation of seven weeks. We give below a list of the teachers employed in the various schools. We designed giving this in the last number of the *Teacher*, but the Haven and several new branch buildings were incomplete and could not be occupied at that time, and we preferred waiting until our list could be made more nearly correct.

LIST OF TEACHERS.

High School.

George Howland, *Principal.*
Edward C. Delano,
George C. Clarke,
James R. Dewey,
George P. Wells,
Edward C. Porter,
George E. Adams,
A. Henry Van Zwoll,
Oscar Faulhaber,
S. Grace Thompson.

Dearborn School.

George D. Broomell, *Principal.*
Alice J. Jennings,
Alice L. Barnard,
Rose J. Bateson,
S. Augusta Goold,
Sarah J. Merriman,
Myra L. Felker,
Carrie M. Whitehead,
Ella C. Bradley,
Celia M. Cleaves,

Jones School.

Willard Woodard, *Principal.*
Harriet Barnes, *Head Assistant.*
Nellie S. Phillips,
Lavinia C. Perkins,
Ellen M. Wadsworth,
Isabella H. Thompson,
Annie E. Trimingham, *Ass't Principal.*
Eliza L. Gass,
Olive Backus,
S. A. Whitehead,
Isabella Morris,
Ellen S. Warner,

Scammon School.

Daniel S. Wentworth, *Principal.*
Annie Z. Lewis,
Emily L. Beach,
Mary L. Read,
Helen C. Litchfield, *Ass't Principal.*
Hannah Cooke,
Martha A. Merriman,
Kate K. Raworth,
Judith A. Gaffney,
Eliza E. Ransom,
Carrie Hatch,
Martha P. Fennimore.

Kinzie School.

Benjamin D. Slocum, *Principal.*
Rebecca E. Jones,
E. Josephine Ayer,
E. S. Tanner,
Ada F. Gifford,
Celia G. Whipple,
Lizzie M. Rickcords,
Kate Lonergan,
Mary E. Carpenter,
Carrie C. Youse.

Franklin School.

Albert G. Lane, *Principal.*
Eliza Archard,
Ellen W. King,
Emma Dickerman,
Averick T. Shockley,
Rebecca C. Southworth,
Henrietta Armstrong,
Kate Clingman,
Naomi Dougall,
Elizabeth C. Rust,
Anna M. Cooper.

Washington School.

Benjamin R. Cutter, *Principal.*
Helen A. Butler,
Emma F. Cutter,
Annie Kennicott,
Julia A. Nelson,
Sophia L. Dean,
Eliza A. Prentice,
Helen D. Kendall,
Ada C. Miller,
Lucy A. Kendall,
Clara E. Thatcher,
Maria K. Jennings,
Agnes M. Manning,
Mary L. Hull,
L. Eva Stow,

Moseley School.

S. A. Briggs, *Principal.*
M. Louise Wilson, *Head Assistant.*
Harriet M. Paine,
Carrie E. Haff,

Emily L. Briggs,
Mary E. Reed,
Catharine C. Fox,
Mary L. Herbert,
Rachel A. Coale,
Hannah Dickinson,
Julia C. Goold,
Mary E. Clarke,

Brown School.

Samuel H. White, *Principal.*
Miriam S. Sherman, *Head Assistant.*
Alice A. Loveless,
Mary J. Creswell,
Mary J. Cowen,
Clara H. Perkins,
Lizzie Skelton,
Lydia C. Avery.

Foster School.

George W. Spofford, *Principal.*
Jennie E. McLaren, *Head Assistant.*
Belinda N. Jones,
Sarah J. Ellithorpe,
Elia N. Flagg,
Ann E. Alden,
Eliza A. Coombs,
Ann E. Winchell,
Sarah J. Buchanan,
Helen A. Woodbury,
Melissa B. Rounds,
Susan E. Church,
Catharine Fomhof,
Arvilla Crawford,
Frances E. Johnston,
Fannie S. Paige,
Frances E. McIntyre.

Ogden School

F. S. Heywood, *Principal.*
Hattie E. Crandall, *Head Assistant.*
Caroline Westcott,
Juliet B. Smith,
Mattie Myers,
Alice M. Wilmans,
Anna M. Duffy,
Frances M. Smith,
Sarah E. Austin,
Julia E. Keith,
Achsa C. Mott,
Kittie Craig,

Newberry School.

Curtis C. Meserve, *Principal.*
Emma Hooke,
Eva Lewis,
Clara M. Todd,
Ellen V. Lamb,
Aurelia S. Russell,
Ella A. Kimball,
Eliza C. Boyce,
Carrie E. Young.

School No. Twelve.

Eugene L. Aiken, *Principal.*
Sue M. Weatherhead,
Rebecca Gosselin,
Charlotte A. Lamb.

Skinner School.

A. N. Merriman, *Principal.*
Sophia J. Marshall, *Head Assistant.*
Mary Noble,
Gertrude Van Patten,
Sarah J. Fleming,
Annie L. Woodford,
Matilda Miller,
Julia R. Graves,
Martha Throop,
Susan A. Swift,
Lizzie M. Kennedy,
Louise M. Dunning,
Phebe J. Bailey,
Leonice B. Woodford,
Ida R. Dewey,
C. A. Norman,
Mary G. Sinclair,
Annie K. Moulton,
Orilla L. Salisbury,
Sarah O. Flagg.

Haven School.

James J. Noble, *Principal.*
James T. Austin, *Head Assistant.*
Laura A. Kellogg,
Jessie E. Leavenworth,
Sophia A. Dow,
Abby M. Sanford,
M. Edna Comstock,
Lucy A. Williams,
Cordelia M. Hawley,
Marian Mackway,
Sylvia E. Walker,
Eliza Lundegreen.

The Haven School opened on Monday, Sept. 22, having been dedicated on the Saturday previous. At the dedicatory exercises Luther Haven, President of the Board, presided. Mr. Ward, Chairman of the Building Committee, delivered the keys into the hands of the President, who in turn passed them to the Principal, appropriate speeches being made in each case. Remarks were made by S. S Hayes, City Comptroller, and an address was delivered by Hon. Newton Bateman. Singing by scholars from the Jones School. The exercises were of a highly in-

teresting character, and were witnessed by a large number of spectators. It is a fact worthy of note that this is the first school-building ever dedicated in Chicago.

The branch schools in the Kinzie, Washington and Franklin districts opened during the week ending October 17. The buildings are pretty nearly models of school architecture, each one accommodating nearly 400 scholars, and costing all complete about $4,000 each; and it will pay village or country districts to look at them before building. G. P. Randall, of Chicago, is the architect of all.

In the Institute, which is held in the High-School building on the Second Saturday of every month, a new plan has been adopted, calculated to make the Institute more of a working one than it has hitherto been, and intended to familiarize the teachers with the Oral Course, in the teaching of which there has been great lack of uniformity. Through the last hour of the session the Institute is divided into five sections of two grades each, each section being presided over by an officer elected for the term. Two teachers are appointed to every section, who give regular half-hour class exercises, on an assigned topic in their grade. The programme at the last Institute, October 11, was as follows:

Section A.	Grade 1.	Government, by Mr. Howland.	
	" 2.	Circulation of the Blood, by Mr. Slocum.	
Section B.	" 3.	Division by Factors, by Miss Phillips.	
	" 4.	Reading, by Miss Bliss.	
Section C.	" 5.	Arithmetic, by Miss Cooke.	
	" 6.	Form, by Miss Dow.	
Section D.	" 7.	The Eye and the Ear, by Miss Perkins.	
	" 8.	Reading, by Miss Bradley.	
Section E.	" 9.	Animals, by Miss Norman.	
	" 10.	Form, by Miss Clarke.	

For the next Institute, November 15, a similar programme has been drawn up. The exercises of the early part of the session will be the Paper by the Newberry School; a lecture by Mr. Clarke, of the High School; and the usual notes on School Management by the Superintendent, with singing by the members of the Institute.

Cook County Teachers' Institute.—The teachers of Cook County have just held two very successful Institutes, one in the north and the other in the south part of the county. Both were conducted by the School Commissioner, J. F. Eberhart. The first was held at Thornton, on the Illinois Central Railroad, commencing on Tuesday, September 30, and closing with a sociable on Friday evening, October 2. Lectures were delivered by J. F. Eberhart, Philip Atkinson, and S. A. Briggs. During the day sessions the usual drill exercises were had, together with physical and oral exercises and object lessons, conducted by the above-mentioned gentlemen, and D. S. Wentworth, D. J. Stewart, and M. Granger. Mr. Dalton, Chairman of the Committee on Education of the Board of Supervisors, was present during two days, taking part in the exercises. Seventy teachers were present, and the Institute was in all respects a very profitable one. There would have been a large attendance but for the rain, an abundance of which fell every day, making the roads almost impassable.

The second Institute was held at Dunton, on the Northwestern Railroad, commencing Monday, October 6, and closing Friday evening following. The weather was cold and clear, and the attendance prompt and large during the whole five days. One hundred and eleven teachers were present, taking part. The lecturers were Rev. C. H. Fowler, Perkins Bass, John Jamison, and J. F. Eberhart, and

exercises were conducted by W. H. Wells, W. Woodard, O. H. Herrick, and others. Mr. Alex Kerr, School Commissioner of Winnebago County, read a patriotic poem entitled 'Lights and Shadows'. Mr. William Tillinghast conducted the singing.

The series of resolutions adopted at both Institutes were highly patriotic in their character. The Institute closed with a sociable. It is said to have been the most successful one ever held in the county.

The *Teacher* is glad to welcome the forty new subscribers obtained at Dunton and Thornton. B.

Lake County Teachers' Institute.—Nearly one hundred of the Teachers of Lake County assembled together Sept. 15th, in this city, at the call of the School Commissioner for a Teachers' Institute. They were five days together in session, and enjoyed in the time a truly intellectual feast. Mr. Charles E. Fay, School Commissioner of Lake County, was chosen President of the meeting, and conducted the exercises throughout the session.

Remarks on the subject of Music, Grammar, and Corporal Punishment, were made by Rev. George L. Little, Superintendent of Public Schools in Waukegan. Mr. L. advocated teaching music as a regular study, and believed that corporal punishment should be banished from the school-room.

Remarks on the subjects of Orthography, Algebra, and many other studies, were made and musical exercises conducted by Rev. L. Hankins of the Waukegan M. E. Church. Mr. H. strongly condemned our present ridiculous system of spelling. Spelling *tizik* in the nineteenth century p-h-t-h-i-s-i-c was sufficient cause for kicking all the spelling-books in Christendom into the street, and Salem Town, Sanders, and Noah Webster, after them.

Mr. Butler, of Waukegan Central School, conducted class drills and made remarks on Orthography, Grammar, Self-Reporting, and other topics that came before the Institute. Mr. B. recommended spelling by sound, and was an advocate of self-reporting by scholars as one means of securing good scholarship in school.

Mr. Hill conducted class drill in Reading, and made remarks on the subject of Penmanship. Mr. H. urged upon the attention of teachers the importance of making penmanship a daily exercise in school, as being one of the most important of the primary studies, but claimed that one great error of teachers was that of writing copies for their scholars. His reasons being—1st. No teacher has time. 2d. The teacher will be likely to write the copy hurriedly, and consequently imperfectly. 3d. Every teacher has a peculiar style of writing of his own, and the scholar learning to write the style of one teacher must *un*learn what has been learned when writing after the copy of a former teacher. A *good* hand-writing was seldom acquired in our common schools in consequence. He recommended choosing some good system with printed copies, and requiring the scholar to write but one system while learning to write.

Mr. Eberhart, School Commissioner of Cook County, conducted class drills, and made remarks upon nearly every branch of study usually taught in public schools. Thought Algebra out of place in our common schools—a more practical study taught in its place would do more good. Thought more attention should be given to Physiology. Thought self-reporting on the part of the scholar was productive of good, and believed that teacher generally most successful that resorted least to corporal punishment.

Mr. Wentworth, of Scammon School, Chicago, conducted class drills in Grammar, Reading, and Object-Lessons. Would teach grammar with the assistance of the blackboard, having the learner write the different parts of speech, construct sentences, etc., upon the same. Mr. W. gave special attention to pronunciation while conducting his class in reading, requiring the class to spell many words by sound.

Mr. Wells, Superintendent Chicago Public Schools, made extended remarks on the Teacher's Duties and Responsibilities and also on the subject of School Amusements. Recommended teachers to allow scholars occasional half-hours for relaxation of mental effort; that the teacher should weave in, as far as possible, instruction in connection with amusement; to make all study as interesting and attractive as possible by the introduction of novelties in school, such as choosing sides in reading, spelling, etc. Lectures were delivered in the evening by Revs. Little and McKaig, and by Profs. Wentworth, Wells, and Eberhart.

Resolutions were passed setting forth the importance of Teachers' Institutes, teaching vocal music in our schools, giving special attention to composition and declamation as branches of study, and opening school each day by scripture-reading and prayer.

Resolutions were also offered thanking the school commissioner for his efforts in behalf of the schools in Lake County, urging the claims of the *Illinois Teacher* as an educational journal, thanking the citizens of Waukegan for their hospitality, and the editor of the *Waukegan Gazette* for publishing articles relating to the Institute.

The session was closed by a grand levee in the evening in one of the largest halls of the city, in which the teachers cultivated the acquaintance of each other, talked over their future plans, and formed new resolutions which will be shown in their modes of teaching hereafter.

All together, the occasion was undoubtedly one of the most successful of all the teachers' associations ever held in the state, and the good that will result from this convention it is impossible at present to estimate.

THOS. E. HILL, *Secretary.*

Waukegan, Oct. 10, 1862.

NOTES AND QUERIES.

A BEAUTIFUL SIGNIFICATION.—Alabama, in the Indian language, signifies 'Here we rest!' A story is told of a tribe of Indians who fled from a relentless foe to the trackless forests in the Southwest. Weary and travel-worn, they reached a noble river which flowed through a beautiful country. The chieftain of the band stuck his tent-pole in the ground and exclaimed, "Alabama! Alabama!"—Here we rest! Here we rest!

CORN PAPER.—Paper is now extensively manufactured from corn-leaves in Austria. The paper is said to be tougher than any paper made from rags, while it is almost free from silica, which makes paper made from straw so brittle.

CURIOUS ORIGIN OF SOME WORDS.—Dr. Latham, in his Grammar, gives some curious instances of the misspelling of words arising from their sound, which

error has led to the production, not only of a form, but of a meaning, very different from the original. Thus *Dent de lion*, originally referring to the root, has been corrupted into *dandelion*, having reference to the flaunting aspect of the flower. *Contre-dance* has become *country dance*. *Shamefastness*, originally referring to the attire, has become *shamefacedness*, and applied to the countenance. *Cap-à pié* has produced *apple-pie order*. *Folio capo*, Italian for the first sized sheet, has produced *foolscap*. *Asparagus, sparrowgrass; Girasole artichoke, Jerusalem artichoke*. *Massaniello*, the name of a famous Neapolitan rebel and the hero of the opera, is nothing but *Mas-Aniello*, a corruption of the true name *Thomas Aniello*. *Hougoumont*, famous in the annals of Waterloo, is properly *Chateau Goumont*.

Omnibuses.— Few things in modern times have been such influential agencies as the omnibus. Their history is one of more dignity than shows on the surface. Those social conveniences have revolutionized all the chief capitals of Europe. Invented in 1827, they ruined the elder branch of the Bourbons in 1830. The accidental upset of an omnibus suggested the first idea of a barricade, and for a long time constituted an essential part of the structure which changed the whole science of revolutions. The overturn of the carriage was converted to the overturn of a monarchy. Since that time the omnibus, as we have said, has made the tour of Europe. Among ourselves it is a peaceful and health-giving instrument. By its help all the world is able to live out of town. Barristers, merchants, artists, and men of letters, who formerly crowded the narrow courts and passages of Fleet-street and Cheapside, live now, by its permission, in snug suburban cottages in Norwood, Hampstead, Putney, or Blackheath. The Johnsons and Goldsmiths of the last age met in close courts and stifling taverns for want of the omnibus. It is not very many years since a single coach ran from Hampstead to London once a day — the charge eighteen pence. A man may now ride from Charing-cross to any part of the suburbs of London, at any minute, for a sixth of the money.

English Paper.

The First Paper Money in Europe.— After the city of Alhambra was taken from the Moors, the veteran Count de Tendilla was left Governor, and we are informed that this cavalier at one time was destitute of gold and silver wherewith to pay the wages of his troops, and the soldiers murmured greatly, seeing that they had not the means of purchasing necessaries from the people of the towns.

In this dilemma what does this most sagacious commander? He takes him a number of little morsels of paper, on which he inscribes various sums, large and small, according to the nature of the case, and signs them with his own hand and name. These did he give to the soldiery in earnest of their pay. How! you will say, are soldiers to be paid with scraps of paper? Even so, I answer, and well paid too, as I will presently make manifest; for the good count issued a proclamation ordering the inhabitants of Alhambra to take these morsels of paper to the full amount thereon inscribed, promising to redeem them at a future time with silver and gold, and threatening severe punishment to all who should refuse. The people having full confidence in his words, and trusting that he would be as willing to perform the one promise as he was certainly able to perform the other, took those curious morsels of paper without hesitation or demur. Thus by a subtle and most mysterious kind of alchemy did this cavalier turn a useless paper into precious gold, and make his impoverished garrison abound in money. It is but just to add that the Count of Tendilla redeemed his promise like a loyal knight; and this miracle, as it appeared in the eyes of Antonio Agrepidea, is the first instance on record in Europe of paper money, which has since inundated the civilized world with unbounded opulence.

W. Irving.

QUERIES.—7. Whence arose the custom of rating steam-engines at so many horse-powers?

8. On a cold night some water was left standing in a metallic vessel. In the centre of this a small china cup was left, which also contained water. The water in the outer vessel was frozen solid, while the water in the inner one was in its temperature considerably above the freezing-point. Why was this?

NOTICES OF BOOKS, ETC.

THE LEGAL ADVISER AND COMMERCIAL RECORD. Chicago: E. M. Haines, Publisher. Monthly. One dollar a year.

We are glad to call attention to this newspaper, whose circulation extends through all the Northwestern States, including every organized township in the State of Illinois. Its legal department not only exhibits the various subjects of interest connected with the profession, but contains such information as is required in practical business affairs, thus affording that kind of legal matter adapted to all pursuits in life. It affords, also, a considerable amount of commercial, statistical, and general information. B.

THE SILVER LUTE: A new Singing-Book for Schools. By Geo. F. Root. Chicago: Root & Cady. 192 pages. Price 35 cents.

We have examined this, the first singing-book ever wholly made in Chicago, thoroughly, and we believe it is the best school singing-book ever published; best because of its adaptation to all classes of scholars in our common schools, for its range extends from the simple-movement songs for our smallest primary scholars, away up to the more difficult pieces suitable for either the school or the home.

Much of the elementary part is borrowed from Dr. Lowell Mason and others, but the larger part of the *Silver Lute* is fresh and new, both in words and music. We are glad to see so large a number of pieces adapted to the extraordinary times in which we live, for the children love to sing such songs as the 'Battle-cry of Freedom'; 'Wrap the Flag around me, Boys'; and 'We shall Meet, but We shall Miss Him'; for their hearts beat in unison with those of their fathers and brothers on the battle-field, struggling for freedom and the beloved institutions of our beloved Fatherland.

The greatest fault we find with it is that the collection of devotional pieces is, with the exception of 'Autumn', taken entirely, hymns and tunes, from the *Normal Singer*. To those of us who have used the *Normal Singer* for the last four or five years, and sung over these tunes until they are tired of them, this is a grievous fault. We feel free to complain thus much, because otherwise the book merits so much praise. B.

HARPER for November, which is promptly at hand, is an extra number, and closes the twenty-fifth volume. The contents are 'Poland, Overground and Underground', by J. Ross Browne; 'A Notable Congress'—not that which

assembles early in December at Washington, but one of horse-flies, gnats, *et id omne genus;* 'The Last of the Dandies'; 'Madeleine Schaeffer', by Miss Prescott; 'The First Colonial Congress', by Benson J. Lossing; 'Not at My Expense', by T. S. Arthur; 'Romola', by Miss Evans; 'Our Cousins from Boston', by Frances Lee'; 'Orley Farm', by Trollope; 'Buying Winter Things', by Louise Chandler Moulton; 'Mistress and Maid', by Miss Mulock; 'Non Respondet', a beautiful poem, by Clarence Stickney; 'The Small House at Allington', by Anthony Trollope; 'Love in Autumn', by N. G. Shepherd; 'Arctic Explorations', by W. Parker Snow; 'Monthly Record of Current Events'; 'Literary Notices'; and the 'Editor's Table', 'Easy Chair', and 'Drawer'. B.

THE CONTINENTAL MONTHLY has failed to reach us (the Associate Editor) since the change in the management, of which we heard through another of our exchanges, our last number being that for August. The same authority informs us that the doubling-up of teams in the *Continental* office has made what was *good*, and fast growing *better*, pretty nearly *best*. We really can not afford to lose the *Continental*, and besides, our wife has got interested in 'Was he Successful?' and wants to see the end of it. Shall we hear from you again, friends? B.

THE GRADED SCHOOL. A Graded Course of Instruction for Public Schools, with copious Practical Directions to Teachers, and Observations on Primary Schools, School-Discipline, School-Records, etc. By W. H. Wells, A M., Superintendent of Public Schools, Chicago, and late Principal of the State Normal School at Westfield, Mass. A. S. Barnes & Burr, New York; Geo. Sherwood, Chicago.

DEPARTMENT OF PUBLIC INSTRUCTION,
Springfield, Illinois, Sept. 12, 1862.

DEAR SIR: I consider Mr. Wells's little book on 'Graded Schools' as the most valuable treatise published in this country.

It attempts, successfully I think, to mark out a definite, detailed, progressive course of study for the common schools of our cities and larger towns, or wherever a thorough and rigid classification is admissible.

No one but a practical teacher of large experience, and of clear and comprehensive views of educational philosophy and of the laws of mental growth, could have written the book. Mr. Wells has grappled with the elements of his difficult problem with great patience and skill, and educed order from confusion. It can not be denied that many of even our best teachers have no well-defined conception of what a graded school is, and what the course of study should be: hence they work on no plan; *circumstances*, continually changing, are allowed to determine the course of study, defeating all hope of symmetrical training. This, with Mr. Wells's volume at hand, need be so no longer. The directions to teachers are clear, full, and eminently practical; and the work opportune, appearing at a time when the subject of oral and object teaching is arresting general attention.

I most warmly reccommend it to all teachers and friends of common schools, who will, I am sure, when they come to read the book, thank its author, as I do, for his timely and valuable contribution to the cause of education.

The foregoing is my opinion in brief of 'Graded School'. It is at your service. Truly yours, N. BATEMAN.

[We publish the above as expressing the value of Mr. Wells's book on Graded Schools by one who knows. Teachers should send for the book to Geo. Sherwood, Chicago.—ED.]

NEW AND ENLARGED PATRIOTIC SONG-BOOK. Written and composed for the times. Horace Waters, New York.

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A MANUAL OF INFORMATION, AND SUGGESTIONS FOR OBJECT-LESSONS IN A COURSE OF ELEMENTARY INSTRUCTION. Adapted to the use of the School and Family Charts and other aids in teaching. By Marcius Willson. New York: Harper & Brothers. Accompanied by a series of Charts, and a box of Colored Cards. [See advertisement.]

The best book of the kind we have seen.

The hurry and irregularity of moving our family and household to Rock Island from Dixon will be our apology for a lack of matter this month. All the above matters will be noticed more fully next month. All are particularly good. ED.



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These splendid Charts, 22 in Number, size of each about 22 by 30 inches, and containing *more than* **600** *colored illustrations*, will be furnished either separately or in full sets, either mounted or in sheets, and also, for Family use, in Atlas form. When mounted, two are on a card. They are sent by mail, *in sheets*, at the prices named.

The first six, which are Reading Charts—7th, Elementary Sounds—8th, Phonic Spelling—9th, Writing—10th, Drawing and Perspective—11th, Lines and Measures—12th, Forms and Solids, in *Sheets*, 25 cents each *Mounted*, 60 cents per card.

No. 13, containing 35 Familiar Colors (and accompanied by 70 Hand Color-Cards), in Sheets, 90 cents. No. 14, Chromatic Scale of Colors, in Sheets, 60 cents. The two Color Charts, with Hand Color-Cards, mounted, $1.80.

Nos. 15 and 16, Quadrupeds; 17, Birds; 18, Reptiles and Fishes; and 19, 20, 21, and 22, Plants, at 35 cents each, in Sheets; Mounted, 90 cents per card.

Price of the entire Set, in Sheets, $7.00; Mounted, $9.00; Atlas Form, $11.00.

II.

A Manual of Instruction in Object Lessons, adapted to the use of the School and Family Charts, and other Aids in Teaching. By Marcius Willson. Price $1.00.

These truly splendid charts, 22 in number, size of each about 22 by 30 inches, and containing more than 600 colored illustrations, are a long step in advance—in attractiveness at least, and apparent utility—of any previous school-room aids which have fallen under our notice. There are six charts of illustrated Reading-Lessons for the little ones, with type large enough to be easily read thirty feet distant; a chart of Elementary Sounds, of Phonic Spelling, of Writing, Drawing, and Perspective. Lines and Measures, Forms and Solids; two beautiful charts of Colors—worth, alone, to the young ladies in our female seminaries, the price of the whole set; and colored charts of Quadrupeds, of Birds, of Reptiles, and Fishes; and four charts of Plants, to illustrate the Forms Classification and Uses of the Vegetable Kingdom. Although a seemingly wide range of studies is here presented for childhood, yet, by the aid of the accompanying Manual, the whole is adapted to a plain, practical, and interesting course of familiar, elementary, school-room, or family instruction.—The *Manual*, by Mr Willson, is not only an exposition of the principles on which the *Development* system, or system of 'Object-Teaching', as it is generally called, is based, but it contains the directions and the information which are required by the teacher to enable him to use the charts to advantage, and to adapt the system itself, with all available aids from natural objects to the practical duties of the school-room. Those who suppose that the system here developed consists merely of oral instructions about 'common things', and hence is defective as a means of discipline, will learn from this work that its tendencies are the very opposite of the 'pouring-in' method, and that it claims so to educate—'develop'—the perceptive faculties of childhood as to combine the most extended and thorough mental culture with the readiest acquisition of knowledge. The author further shows this system of teaching by the aid of the 'objects' themselves to be no new thing, but the system on which Nature imparts instruction, and on which all science has been built up in the progress of the race; and that it is in the school-room chiefly, and in primary education most strikingly, that we have departed from its principles. As illustrative of the manner in which science is popularized in this work, as well as in the series of Readers by the same author, we would call attention to the chapter which treats of Colors—their manifold tints, shades, and hues—their combinations, proportions, complementaries—and their harmonies in nature, dress, paintings, etc. Our schools, at least, will no longer have an excuse for remaining ignorant upon a subject which addresses itself with so much interest to our constant, everyday observation. It is the *common things of life*, so many of which 'science' has appropriated to herself and disguised under a forbidding nomenclature—the miracles of wisdom, goodness, and design every where around us—the very things that appeal to our sympathies and interests—that we have hitherto too much neglected in our system of education.

From WM. H. WELLS, ESQ., *Supt. of Public Schools of Chicago*, Oct. 4, 1862.

I have read your 'Manual of Instruction in Object Lessons' with more than ordinary care, and with more than ordinary satisfaction. It is admirably suited to the object for which it has been prepared, and furnishes more substantial aid to teachers in arranging and filling out a systematic course of object lessons, than any other work that has yet been issued.

From HON. S. S. RANDALL, ESQ., *Supt. of Public Instruction, New York City*, Oct. 8, 1862.

I have carefully examined your admirable series of 'School and Family Charts', and the 'Manual of Instruction in Object Lessons', and highly approve of their design and execution. They will form a very desirable addition to the text-books and charts for our Primary Departments and Schools, and will, I trust, be adopted by the Board, and extensively used by the teachers.

Extract of a Letter from DANIEL HOUGH, *Prin. of First District Public School, Cincinnati, Ohio*, Oct. 6, 1862.

Soon after the opening of our schools I placed the Cleveland Cards, McGuffey's Charts, and your 'School and Family Charts', in the hands of three teachers, who had large classes of children—more than sixty in each—not yet in books. To the *best* class I gave the Cleveland Cards, and to the *poorest* yours. Of course I did not have your 'Manual', designed to accompany the Charts, and could not know your method . . . But with your Charts, the children *were taught*, and they *learned to name*, all of the sixty words on chart No. 1, to *spell* them, and to *count* them, in the short space of *two weeks*.

We will now, having your Manual, change our method more in accordance with your directions. But your whole plan is excellent, and you will never know the amount of good you have done for the many teachers who are anxious to teach right, but do not know how. Your plan of *Oral Composition*, as taught in connection with the Charts, is, in my opinion, the correct one, and is worth more to the true teacher than all the works on 'Composition-Writing' that have been published. The Reading Charts I consider as nearly perfect as books or charts can be made.

☞ *For a full Description of Willson's Readers, School and Family Charts, Object Lessons, etc., see* EDUCATIONAL BULLETIN, *which may be obtained gratuitously on application to* HARPER & BROTHERS.



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From Hon. N. BATEMAN, *State Supt. Public Instruction for Illinois.*

OFFICE OF STATE SUPT. OF PUBLIC INSTRUCTION,
Springfield, Illinois, Jan. 28, 1860.

It is a work of which any man or nation might well be proud: a monument of learning, of vast and varied research; of patient and elaborate analysis; of keen and accurate discrimination — a storehouse of clear, sharp-cut, comprehensive definitions.

As an American, I am proud of this magnificent work. In the library of every scholar it *will be;* in every district school-house in the land it *ought to be.* N. BATEMAN.

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From *The Tribune*, August 2.

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ILLINOIS TEACHER.

VOLUME VIII. DECEMBER, 1862. NUMBER 12.

COMPOSITION-WRITING.—NUMBER X.

HAVING now roughly developed the whole process of essay-making, from the first rude outline on the board for a small class to the method of criticising the efforts of older scholars, let us look at some of the various forms in which compositions may be written. Pupils naturally get tired of continually writing about themes, whether chosen by themselves or not. To say they like change is simply to assert a fact common to humanity, old or young. Now, as we have before stated, the two great ends of composing are the awakening of thought and the improvement of style: hence, whatever plans the teacher may devise to vary the monotonous giving of subjects, they should be embraced, provided said plans possess the merit necessary to enlist the love and energy of the writer.

The Diary form, for instance, may be used. Just before dismissing for the Christmas Holidays, for example, advise your class to make a brief entry of the business and enjoyments of each day during the vacation, and bring the same, neatly worded, with them on their return to school. These diaries will often be quite entertaining.

The Journal affords a most excellent medium of natural expression. We do not know that we have ever seen it recommended—at least not in print. The idea was suggested to us from the passing comments on public affairs or private thoughts which are frequently found in the manuscripts of distinguished persons, and given in their biographies. As we esteem this exercise very highly, we shall copy a specimen lately read to the class:

JOURNAL. *Wednesday, September* 10. Driving home from Empire to-night, could not help admiring the bright waters of Rock

river, as they sparkled in the rays of the evening sun. How essential a feature is water to the full beauty of a landscape! When a Greek islander was taken to admire the charms of the Vale of Tempé, so celebrated for its magnificence throughout Greece, after gazing for some time in silence, he at last exclaimed "The sea! the sea! where is it?" A sweep of country, extensive and variegated as it may be, without a noble lake or stream to enliven it, is like the play of Hamlet with Hamlet left out. Let them laud our high and dry prairies who will; but give me the scenery of the mountains with their wild torrents and crystal cascades.

Thursday. The autumnal winds have begun to blow. Before long we must bid adieu to the warm breezes of the south; the fields will soon be clad in dying yellow, and the heavy green of the woods change to those gorgeous hues for which the fall scenery of American forests is so celebrated.

Friday. Reading 'Forty Years' Familiar Letters' of Dr. Alexander. What a distinguished family the Alexanders were! Archibald, the father, one of the patriarchs of the Presbyterian Church; Addison, one of his sons, a Biblical and Oriental scholar inferior to none our country has ever produced; and Jas. W., another son, in point of varied learning and active piety had few equals in the American ministry.

Monday. Passed a group of men hanging around a blacksmith's shop. Does the neighborhood exist that has not some favorite centre for idlers—some spot where loafers most do congregate? What sage counsels are set forth for guiding the ship of state through stormy seas! A resort of this kind must have been the tavern in Goldsmith's *Deserted Village*,

> "Where village statesmen talked with looks profound,
> And news much older than their ale went round."

It will be observed that we make a distinction between a Diary and a Journal: meaning by a Diary a simple, unexpanded record of events; by a Journal, a text with all the train of reverie to which it may give rise. This distinction, of course, is assumed for convenience—not by dictionary authority. W. W. D.

STERLING, November, 1862.

THE progress of knowledge is slow. Like the sun, we can not see it moving; but after a while we perceive that it has moved; nay, that it has moved onward.

SCHOOL DISCIPLINE.

THERE is, perhaps, no other evil so alarmingly prevalent as the want of proper corrective discipline in our public schools. It is a mischievous opinion that *moral suasion*, by itself, will secure more effectually than any other means cheerful and unvarying submission on the part of the pupil to the authority exercised over him.

A great hue and cry has been raised by the advocates of moral suasion about the *barbarism* of corporal punishment, while, at the same time, it has been observed that almost invariably, where such are parents, their children are the most rude and disobedient in the neighborhood; and, moreover, that they are addicted to vices shunned by the children of those who exercise over them firm yet mild control, and who resort to personal chastisement when deemed necessary. Precisely the same results have been illustrated in our public schools. This, then, is a general rule, to which there may be some exceptions; but the latter, like angels' visits, are few and far between.

It is *not* right to beat a child unmercifully for every little transgression of duty; but there certainly *are* times when the omission to inflict corporal punishment is fraught with terrible evils to the future welfare of the child that willfully disobeys the command of its teacher or parents. To the latter, whose love of their offspring is strongly developed, this is a fact that is slowly learned, and the remedy reluctantly applied.

The origin of most of the insubordination in school has its source and receives its stimulus in the family — in the very homes where this pet doctrine of moral suasion is most strongly advocated and thoroughly practiced. Children under fifteen years of age are not generally guided by reflection or judgment: they are the creatures of impulse; and, when fully aware that there is no 'power behind the throne' to *enforce* authority, can not be restrained from evil by the mere force of parental love and by appeals to conscientious motives. They give free rein to those appetites and passions which a salutary *fear* of *bodily* punishment would have prevented.

If an appeal to duty and conscience are the only incentives to lead mankind to an exercise of the highest attributes of our nature, why the necessity of making laws and of building prisons? Why the terrors of a fiery hell and of a day of judgment? Why does every violation of the physical laws of our being entail a proportionate punishment to the offense committed? The laws of Nature and of God

proclaim the *necessity* of punishment. Have we the right to disdain the lesson set before us? But, sad to say, the lesson is too often disregarded; and the daily experience of teachers is that children whose parents are the strict adherents of the 'moral-suasion theory' are almost totally ungovernable, either by reason or force; are impatient of restraint, and are uncivil and destitute of natural affection. So much for moral suasion. On the other hand, it is a fact just as startling that the offspring of those who resort to the rod in almost every petty case of insubordination reap a harvest of bitter fruits. Their children exhibit traits equally as bad and are just as difficult to govern as those subjected to the opposite extreme: affording a fine illustration of the maxim that 'extremes meet'. In high northern latitudes intense cold produces the same physical effects as those experienced from contact with fire. School and family government form no exception to this universal law. The results are the *same* whether produced by fire or by ice.

There is a *golden mean* in the administration of parental authority, and in that exercised in the school, that will secure implicit obedience, respect, and love. In effecting this the rod must be occasionally brought into use, when other and milder expedients have failed. The chastisement should always be *sufficiently severe* to attain the end in view; otherwise, it had far better not be inflicted at all. It should generally be applied after time has been given for reflection and repentance; but some times it should follow a violation of law as rapidly as thunder follows the lightning.

If the proper course had been adopted in all instances in the home training of the pupil, there would be no demand for the use of the rod in our public schools by properly-qualified teachers; but it is a painful fact that home government is daily becoming more and more inefficient, and, consequently, children more insubordinate and vicious. This results from a foolish parental over-indulgence, that shuns the unpleasant task of correction by the rod, and takes refuge in the delusive but convenient excuse of a moral-suasion doctrine. It is so easy to *slide* into a creed that administers to our individual ease or ill-judged sympathies.

Parents and teachers, this erroneous, this pernicious belief in the efficacy of moral suasion is a source of four-fifths of the sorrow and misery in the land. It is planting the seeds of decay and death in the heart-core of the American Nation. Look to this great fountain-head of mischief before it be too late to reform. Abjure the idea: cast it away from you as a thing of darkness. The Educator.

FAITHFUL STUDENTS SUCCESSFUL MEN.

To a member of Parliament who had intimated that a University Education unfitted young men for the practical duties of life, Hon. T. B. Macaulay made the following reply:

"If I understand the opinions imputed to that noble lord, he thinks the proficiency of a young man in those pursuits which constitute a liberal education is not only no indication that he is in after-life to make a distinguished figure, but that it positively raises a presumption that in after-life he will be overcome in those contests which then take place. I understand that the noble lord is of opinion that young men gaining distinction in such pursuits are likely to turn out dullards, and utterly unfit for the contests of active life; and I am not sure that the noble lord did not say that it would be better to make boxing or cricket a test of fitness than a liberal education.

"I must say that it seems to me that there never was a fact better proved by an immense mass of evidence, by an experience almost unvaried, than this: that men who distinguish themselves in their youth above their contemporaries in academic competition almost always keep to the end of their lives the start they have gained in the earlier part of their career. This experience is so vast that I should as soon expect to hear any one question it as to hear it denied that arsenic is poison, or that brandy is intoxicating. Take the very simplest. Take down in any library the Cambridge Calendar. There you have the list of honors for a hundred years. Look at the list of wranglers, and of junior optimes, and I will venture to say that for one man who has in after-life distinguished himself among the junior optimes you will find twenty wranglers. Take the Oxford Calendar: look at the list of first-class men, and compare them with an equal number of men in the third class, and say in which list you find the majority of men who have distinguished themselves in after-life. But is not our history full of instances which prove this fact? Look at the Church, the Parliament, or the Bar. Look to the Parliament from the times when Parliamentary Government began in this country — from the days of Montagu and St. John to those of Canning and Peel. You need not stop there, but come down to the time of Lord Derby, and my Right Honorable friend the Chancellor of the Exchequer. Has it not always been the case that the men who were first in the competition of the

schools have been the first in the competition of life? Look also to India. The ablest man who ever governed India was Warren Hastings; and was he not in the first rank at Westminster? The ablest civil servant I ever knew in India was Sir Charles Metcalfe; and was he not a man of the first standing at Eton? The most distinguished member of the aristocracy who ever governed India was Lord Wellesley. What was his Eton reputation? What was his Oxford reputation?

"If there be in this world a trying test of the fitness of men for the competition of active life, and of the strength and acuteness of their practical faculties, it is to be found in the contests of the English bar. Look at Lord Mansfield, Lord Eldon, Lord Stowell, Sir Vicary Gibbs, Lord Tenterden, and Lord Lyndhurst. Take either the common-law or the equity bar. The present Lord Chief Baron was senior wrangler; Mr. Baron Alderson was senior wrangler; Mr. Justice Maule was senior wrangler; Mr. Baron Parke was eminently distinguished at the university for his mathematical and classical attainments; Mr. Baron Platt was a wrangler; and Mr. Justice Coleridge was one of the most eminent men of his time at Oxford. Then take the equity bar. The Lord Chancellor was a wrangler; Lord Justice Sir George Turner was high in the list of wranglers; all the three Vice-Chancellors were wranglers; Sir Lancelot Shadwell was a wrangler, and a very distinguished scholar; my friend Sir James Parker was a high wrangler, and a distinguished mathematician. Can we suppose that it was by mere accident they obtained their high positions? Is it possible not to believe that these men maintained through life the start which they gained in youth? And is it an answer to these instances to say that you can point—as it is desirable you should be able to point—to two or three men of great powers, who, having neglected the struggle when they were young, have afterward exerted themselves to retrieve lost time, and have some times overtaken and surpassed those who had got far in advance of them? Of course, there are such exceptions. Most desirable is it that there should be, and that they should be noted, in order to encourage men who, after having thrown away their youth, from levity or love of pleasure, may be inclined to throw their manhood after it, in despair; but the general rule is, beyond all doubt, that which I have laid down. It is this: that those men who distinguish themselves most in academical competition, when they are young, are the men who, in after-life, distinguish themselves most in the competition of the world."

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SCHOOL EXERCISES.

TRANSFER QUESTIONS, GRADE B TO GRADE A. CINCINNATI INTERMEDIATE SCHOOLS.

HISTORY.—1. What two nations made the first two settlements in New Jersey?

2. When was Hartford, in Connecticut, settled? Where did the settlers come from?

3. What three colonies were at one time under the control of the Duke of York?

4. What did Roger Williams do in the Pequod War?

5. What three colonies were first included in the Connecticut charter?

6. Why did the whites make war upon the Narraganset Indians?

7. What good things did Canonicus and Miantonomah each do for the whites?

8. What two colonies were at different times under the control of the governor of New York?

9. What colony did Oglethorpe at one time invade?

10. Tell what the book says was the beginning of American commerce.

11. What two nations sent ships with soldiers to invade South Carolina in 1706?

12. Where and when was the plan to unite the colonies first talked about?

13. Name all the different English commanders-in-chief during the French-and-Indian War.

14. Name the great French commander in the French-and-Indian War, and tell what forts he took from the English.

15. Name the three commanders that went against Fort Ticonderoga.

16. What expedition did Forbes conduct in 1758?

17. Who does the book say was 'the greatest soldier of them all'? What great things did he do?

18. What did Col. Armstrong do in 1756?

19. Where was Loudon when Fort Oswego was taken?

20. When and where was the treaty made that closed the French-and-Indian War?

GEOGRAPHY.—1. What is a great circle?

2. Why is it less warm in the Temperate than the Torrid Zone?

3. Where does Mohammedanism now exist?
4. Give the area of the land surface of the earth.
5. Name the productions of New Brunswick.
6. Locate and describe Quebec.
7. Bound Texas.
8. What states are included within the basin of the La Plata?
9. Name five important seaports of Russia?
10. Locate the following cities, viz: Königsberg, Rouen, Basle, Navarino, and Glasgow.
11. What two rivers unite to form the Gironde river?
12. Name the Channel Islands.
13. What does India embrace?
14. What mountain range north of Thibet?
15. What gulf northwest of the Yellow sea?
16. What two rivers empty into the Sea of Aral?
17. Name the most southerly cape of Asia.
18. Bound Persia.
19. Name the divisions of Western Africa.
20. Describe the Sandwich Islands.

PROBLEMS.—1. Find the greatest common divisor of 280, 385, and 455.

2. Find the least common multiple of 18, 20, 24, 27, 30.

3. Reduce $\frac{\frac{2}{3} \text{ of } \frac{3}{4} \text{ of } \frac{5}{6}}{\frac{1}{2}\frac{1}{2}+1\frac{3}{4}+1\frac{1}{2}}$ to a simple fraction.

4. What cost 1 hhd., 1 bbl., 1 gal., 1 qt., 1 pt. of wine at 3 cents per gill?

5. What cost 4 A., 3 R., 25 P. of land, at $40 per acre? (*Perform by decimals.*)

6. What cost 12 yds., 3 qr., 2 na. of cloth, at $3.20 per yard? (*Perform by aliquots.*)

7. Reduce .18425 of a ton avordupois to integers.

8. The consequent in a certain couplet is $22\frac{1}{2}$, the ratio is $6\frac{2}{7}$: what is the antecedent?

9. What cost a pile of wood $8\frac{3}{4}$ feet long, $3\frac{6}{7}$ feet wide, and $6\frac{3}{5}$ feet high, at $4\frac{2}{5}$ per cord?

10. If $\frac{1}{20}$ of an acre of land cost $18\frac{3}{4}$, what cost $7\frac{3}{5}$ acres? (*Perform by proportion.*)

RULES AND PRINCIPLES.—1. How is the local value of a figure increased?

2. If the sum of any column of figures is 13, why is the one carried to the higher order?

3. Define multiplier; divisor.

4. What is the quotient of one sum of money divided by another?

5. What is the multiplier in reduction descending?

6. Give the table for liquid measure?

7. Give the rule for division of compound numbers.

8. Having the longitude of two cities and the time at one of them, how is the time at the other found?

9. Why are all numbers which end in 4, 6, or 8, composite?

10. How is the least number that will contain two or more numbers found?

11. Give the rule for reducing fractions to their least common denominator.

12. Define a common fraction; a simple fraction.

13. How is a fraction reduced to integers of a lower denomination?

14. Explain the operation $7\times\frac{4}{5}=5\frac{3}{5}$.

15. What is a mixed decimal?

16. How is a common fraction whose denominator is 1 with ciphers annexed expressed decimally?

17. Give the rule for division of decimals.

18. How is a compound ratio formed?

19. How is the ratio between two numbers found?

20. How is the third term of a proportion found, the other terms being known?

GRAMMAR.—1. What is meant in grammar by *established usage?*

2. What is a *syllable?*

3. Why is an *adjective* so called?

4. What is an *abstract* noun?

5. What kind of nouns become masculine when personified?

6. To what may the second past tense grammatically refer?

7. Write the plurals of *ox*, *radix*, *genus*, 5, and *handful*.

8. In what two ways may the relation of possession be denoted?

9. Decline *I; thou.*

10. Decline *which*, and *whoever*.

11. Name the *defective verbs*.

12. What is a *compound verb?*

13. What is said in regard to the use of *shall* and *will?*

14. What are *conjunctive adverbs?*

15. What is an *adverbial phrase?*

16. As how many parts of speech is *that* used? Write sentences in illustration.

17. What is the meaning of the prefixes *a*, *dis*, *mis*, *pre*, and *re?*

18. Write a sentence containing a verb in the future, subjunctive, active voice, and parse the object.

19. Define an *affix*.

MENTAL ARITHMETIC.—1. A man bought a horse: after paying $\frac{1}{5}$ of the price and $\frac{3}{4}$ of the remainder, he still owed $16: what did the horse cost?

2. A cistern containing 30 gallons can be filled by one pipe in 5 hours, and emptied by another in $7\frac{1}{2}$ hours: if both pipes be left open, in what time will the cistern be filled?

3. A fox is 60 yards in advance of a dog: if the dog runs 6 yards while the fox runs 4, how far will the dog run to catch the fox?

4. $\frac{7}{10}$ of 50 is $\frac{5}{9}$ of how many times that number of which 8 is $\frac{4}{5}$?

5. A gave B $\frac{2}{5}$ of his money, and to C $\frac{3}{7}$ of his money; the difference between what B and C received was $2: how much had A at first?

6. A grocer, by selling a lot of flour for $25, gained $\frac{1}{5}$ of what it cost him: what was the cost?

7. If $2\frac{1}{2}$ yards of cloth cost $4, how many yards can be bought for $6\frac{2}{3}$?

8. If 12 be added to the difference of two numbers, the sum will be 22 more than the less, which is 4: what is the greater number?

9. If 20 be taken from the sum of two numbers of which 8 is one, there will be 4 left: what is the other number?

10. $1\frac{2}{3}$ is what part of $3\frac{1}{2}$?

SCHOOL SONG. 'OH, I WISH I HAD MY LESSON.' *Tune, 'Dixie'.*—

I 'm glad I live in a land of learning,
Wisdom's hights I 'm just discerning,
Far away, far away, away, far away.
Although some times I 'm sad and weary,
And the way looks dark and dreary,
I 'll away, I 'll away, away, I 'll away.
Chorus.—Oh! I wish I had my lesson,
I do, I do.
In learning I will end my days,
And live and die in wisdom's ways.
I 'll try, I 'll try,
I 'll try to learn my lesson;
I 'll try, I 'll try,
I 'll try to learn my lesson.

Too many children fret and worry
Because they ca' n't learn in a hurry;

Right away, right away, away, right away.
But as for me, as I grow stronger,
I will strive to study longer:
Work away, work away, away, work away.
Chorus.—Oh! I wish, etc.

Some times I think of the sunny hours,
The golden bees, and the pretty flowers;
Far away, far away, away, far away.
But then I know when school is over,
I can run in the fields of clover;
Skip away, skip away, away, skip away.
Chorus.—Oh! I wish, etc.

I love my school next to my mother,
Next to father, sister, brother;
Work away, work away, away, work away.
While I'm young, and while I'm ruddy,
I will work, and I will study;
Work away, work away, away, work away.
Chorus.—Oh! I know I'll learn my lesson:
I do, I do, etc.

VERSES, MAXIMS, ETC.—"A few simple, easy verses, embodying moral sentiments or useful information, will help to furnish an agreeable variety in the exercises of the school-room. The children may also be taught to repeat a few maxims and sentiments, as, 'What is worth doing at all is worth doing well'; 'It is better to suffer wrong than to do wrong'; 'A place for every thing, and every thing in its place'; 'Never leave till to-morrow what should be done to-day'."

W. H. WELLS, in 'Chicago Graded Course'.

"In the morning, the teacher announces the maxim or motto for the day, and allows some pupil to set it up with the letter-cards on the composing frame, or to write or print it on the blackboard, where it remains in view of the whole school. Before dismissing for the day, the teacher calls on one or more pupils to rise and repeat the maxim, and tell its meaning, if he can. Probably the younger pupils will not be able to accomplish much at present in this exercise; but after the teacher has drawn from them what ideas he can, he himself should illustrate and enforce the meaning." Willson's Manual.

1. It is less pain to learn in youth than to be ignorant in old age.
2. It is better to do well than to say well.
3. Kindness, gentleness, and industry, will seldom have an enemy or want a friend.

4. A word once spoken, a coach and four horses can not overtake and bring back.

5. A man of words, and not of deeds,
Is like a garden full of weeds.

6. Good temper is like a sunny day, it sheds a brightness over every thing.

7. Good humor has been called the clear blue sky of the soul.

8. Be always as merry as ever you can,
For no one delights in a sorrowful man.

9. One never loses by doing a good turn.

10. If you love others, they will love you. If you speak kindly to them, they will speak kindly. Love is repaid with love, and hatred with hatred. Would you hear a sweet and pleasant echo, speak sweetly and pleasantly yourself.

11. As in a letter, if the paper is small, and we have much to write, we write closer, so let us learn to economize and improve the remaining moments of life.

12. Speak not evil of the absent, for it is unjust.

13. When you speak of God, or his attributes, let it be seriously and with reverence.

14. Truth is like a torch: the more it is shaken, the more it shines.

15. Patience is good, but perseverance is better.

16. Men with few faults are the least anxious to discover those of others.

17. Fine sense, and exalted sense, are not half as good as common sense.

18. Never employ yourself to discover the faults of others: look to your own.

19. It is good to utter fine sentiments, but better to act up to them.

20. Better do a little work well than half do a great quantity.

21. Whoever is courteous, honest, frank, sincere, truly honorable, generous, and candid, is a true gentleman, whether rich, learned, or a laborer.

22. Those who never admire others are rarely admired themselves.

23. Few have been taught to any purpose who have not been greatly their own teachers.

24. Never put off until to-morrow what can be done to-day.

25. Self-made is well-made.

26. The sun and moon are the red and white roses in the field of Heaven.

27. Those who cry the loudest generally have the least to sell.

28. Providence smiles on all who roll up their sleeves and put their shoulders to the wheel.

29. To own yourself in error is to show that you are wiser than you were.

30. With nearly half the world,
Fine feathers make fine birds.

THE CHILDREN'S DESIRE.—

I think when I read the sweet story of old,
How when Jesus was here among men,
He once called little children as lambs to his fold—
I should like to have been with them then.
I wish that his hands had been placed on my head;
That his arms had been thrown around me;
And that I might have seen his kind look, when He said,
"Let the little ones come unto me."

Yet still to his footstool in faith I may go,
And there ask for a share of His love;
And I know if I earnestly seek Him below,
I shall see Him and hear Him above,
In that beautiful place He has gone to prepare
For all who are washed and forgiven;
And many dear children are gathering there,
"For of such is the Kingdom of Heaven." Hymns of the Ages.

STRICTURES ON MR. WESTMAN EXAMINED.

IN the August number of the *Teacher* are certain 'Strictures on Mr. Westman', to which I have a few words to say. Some things objected to by the writer were not Westman's opinions: I distinctly stated that I was giving the various views and arguments of conflicting writers; but I did not undertake to criticise in detail what I did not like: similarly I shall not examine Mr. Wood's strictures, nor point out our agreements and our differences.

My remark that *them* is objective in the sentence 'Wisdom is worth them all' is said to be a mistake. I am surprised. I can not see that it is not objective because it modifies *all*. I hold it is objective for the very reason that it modifies the word *worth*; and if it modifies *all*, the two must be of the same case, and that case ob-

jective. I see that the writer does not understand the true meaning of the grammatical term *modify*, since he says that *worth* 'modifies' *wisdom*. He is not alone in this lack of understanding, I know; but every one who writes on a grammatical subject in these days should know that *no word or term in the logical predicate can modify a word or term in the logical subject;* and no term in the logical subject can modify a term in the predicate. The relation between any such terms is not *modification*. For proof see any proper definition of the term *modify* in a grammar, or study in logic the meaning of the terms *extension* and *comprehension*. Modifying terms are 'assumed attributes', as Greene would say; never predicated attributes: they limit the *extension* of the modified terms. Thus when I say 'Wise men are found', *wise* modifies *men*, because it limits the *extension* of that word; you can not *extend* the word *men* when modified by *wise* to include as many individuals as you could if not so modified. But if I say 'Men are found wise', the term *men* is not modified or limited at all, and may include all men.

I make no objection to Mr. Wood's 'principle' that the 'office of a word determines its part of speech', except that it is not well and clearly said. But waiving all criticism of the mere form of expression, I must say that this principle leads at once into some of the greatest perplexities of grammar, since in applying it we must accurately determine the offices of all words and classify these offices; and grammarians do not yet agree how many classes of offices there are. Ordinary writers on grammar carefully ignore the real difficulties.

I can not take time to write further on these points, as I am away off in Secessia, and think more of hunting rebels than of grammar. I find not a few Illinois teachers here with me.

SILAS WESTMAN.

INFORMATION ON COMMON OBJECTS.

INTENDED AS MATERIAL FOR ORAL LESSONS.

CAMPHOR.—Camphor exists in small quantities in many plants, but is chiefly obtained from the *camphor* of laurel, a native of China and Japan, which is now cultivated in most of the warm parts of the world. The great supply is obtained from the island of Formosa, and carried in Chinese junks to Canton, whence foreign markets are sup-

plied. The leaves, branches and wood of the tree are cut up and thrown into a boiler containing cold water. The head of the boiler is made of earth, and contains straw. When the water is heated, the steam carries off the camphor, which is deposited in coarse particles, like unclarified sugar, on the straw. These impure grains are placed in a glass flask nearly spherical, having a small opening at the upper part. Heat is cautiously applied, and the last traces of water accompanying the crystals are allowed to escape, when the opening is closed, and the camphor vapor slowly sublimes from the lower half of the flask and accumulates on the upper cool half. When the operation is finished, the flask is broken and cake of purified camphor taken out.

Camphor is a white semi-transparent solid; volatile, having strong aromatic and very peculiar odor. It is very sparingly soluble in water, to which, however, it imparts its peculiar odor and bitter taste. In alcohol it dissolves readily, forming *camphorated spirits*. It is also soluble in oil. If water is poured into camphorated spirits the camphor is precipitated in minute white atoms. It melts at a moderate heat, passing off into vapor, and is very inflammable, burning with much flame and smoke. It is so light that it floats on water, and may then be set on fire.

The strong odor of camphor is obnoxious to insects and moths: it is therefore used to protect cabinets of natural history and clothes. Trunks made of camphor-wood are also much used for the latter purpose. As a medicine its first effect is that of a stimulant, but its action afterward becomes depressing. Taken internally in other than small doses it acts as a poison, a hundred grains being sufficient to cause death. Its strong odor has given rise to the idea that it will prevent infection, and it is frequently carried about the body with this view. This is an erroneous view; its action, from its depressing effects, being decidedly injurious. Dissolved in spirits it forms a valuable application to unbroken chilblains, and also to burns and scalds when the skin is unbroken.

Sponges.—Sponges are animal substances which are found in marine and fresh waters in various parts of the world. Several kinds are natives of our own seas, but the varieties in use are obtained from the Mediterranean; the best are from the neighborhood of the Grecian Islands, and the coarser from the coasts of Barbary. The inhabitants of the Cyclades are trained to dive for sponge from their childhood: to quicken their descent they use a large heavy stone, which is attached to the boat by a rope. They seldom remain under water so long as two minutes at one time. Some of the coarser kinds of sponge are

obtained by dredging the bottom of the ocean. Sponge is a very light, soft, compressible, highly elastic material: on examination with a microscope it is found to consist almost entirely of horny elastic fibres, which are so arranged as to form an infinite number of small tubes that open on the outer surface of the sponge, and communicate internally with larger tubes formed in the same manner.

During the life of the animal these tubes are lined with a soft gelatinous flesh. The animal has the power of causing strong currents of water to flow out of the larger apertures, its place being supplied by what passes in through the smaller pores: this action is always going on, and while the water is so passing the requisite food is withdrawn for the support of the animal. When removed from the water this soft flesh drains away, the elastic fibrous framework or sponge remaining. In some varieties the fibres of the sponge are flinty in their texture: such are, of course, useless in an economical point of view.

The use of sponge as a material for washing, etc., depends upon its porosity and elasticity. The first quality enables it to absorb water with great rapidity: this is easily forced out by pressure, and on being removed the elasticity of the fibres causes the sponge to resume its former size, the tubes being again ready to receive any liquid with which they may be placed in contact.

Whalebone.—The substance termed whalebone is not, as its name might seem to imply, obtained from the bones of the animal, but it forms a substitute for teeth in the Greenland whale and some other species which nearly resemble it. The plates or blades of whalebone, which are usually about three hundred in number in each side, are arranged along the sides of the upper jaw, occupying the usual situation of the teeth in other animals. Each plate is flat, and they are ranged with these flat sides parallel to each other across the jaw. The edges are formed of coarse loose fibres, and are turned toward the inside of the mouth, so that the whole together form a sort of strainer, the lower part of which is received into the hollow of the large and spoon-shaped lower jaw.

This apparatus is the only means which the whale possesses of securing its food; for, although this creature attains the immense length of from fifty-five to sixty-five feet, and a girth of thirty or forty feet, with a weight equaling that of two hundred oxen, it feeds entirely on the small pulpy animals that float in countless multitudes in the water of the Arctic seas. In order to secure these it swims with considerable rapidity, its mouth being open: the water rushes in at the fore-

part, where there are no plates of whalebone, and passes out at the sides, after having been strained through the fringe or filter of whalebone, which allows the water to escape but retains the food. The length of the blades varies considerably, with the size of the animals and the part of the jaw from which they are taken: the longest are usually about nine feet, and the quantity obtained from a full-sized whale is about one ton. The surfaces of the blades are formed of a firm, compact, fibrous substance, which can be readily split in the direction of its length: this substance is tough, strong, very elastic, and capable of receiving a high polish. The color varies from black to a dusty gray or white. Between the two surfaces or sides of these blades there is a layer of coarse fibrous material, and, as before stated, the inside edge and lower end of each blade form a coarse, fibrous fringe.

Whalebone is prepared by boiling it for some hours in water: this renders it soft, and more readily cut: on cooling it becomes harder and darker than before. Its uses greatly depend on its extreme elasticity. Split into fibres it is employed in the place of bristles for making coarse brooms and brushes; it is also used in large quantities for the stretchers of umbrellas and parasols: the whiter pieces, cut in thin strips, are some times plaited into bonnets, and after having been dyed, into artificial flowers: it is also employed in giving stiffness to female apparel.

THE BATTLE OF LIFE.

BY F. W. LIVINGSTON,
15th Illinois Cavalry.

Hail! Friends and fellow Teachers! one and all!
Assembled here at Education's call,
We meet in peace to counsel and advise
How best mankind is made both learned and wise.
No shrill, ear-piercing fifes, no rolling drums,
Have summoned us from quiet, happy homes;
No wild and thrilling clarion notes we heard,
No bugle-blast, nor horn, nor trumpet, stirred
Our souls, and bade us quickly rally here,
To save ourselves and all we hold so dear.
And yet we come not quite as erst we came,
In time of peace, when War was but a name
We found on History's page: a name for deeds

Of which we little knew: and Mercy pleads
In melting strains that man might *never* know
This awful curse, so fraught with pain and woe.
Oh, when we think how many brave and good,
The bravest, *best*, among our brotherhood,
Have rushed into the tented field or camp,
Each bearing on his noble brow the stamp
That tells of manhood true, and proud, and high;
Oh, when we see *them* going forth to die,
Defending bravely, till their latest breath,
Our Nation's honor from impending death;
Shall we, who 're seated here in calm debate,
Regardless be of our dear Nation's fate?
Shall we, *can* we, ignore the awful theme
Of War; or can we o'er it idly dream?
Ah, no! down deep in every soul there lies,
Unseen, perhaps, and hid from human eyes,
Some tender cord that vibrates quick and strong
In sympathy with Right, and hate of Wrong.
We 'll speak not now of bloody battle-scenes,
Of carnage fierce, and death by horrid means.
The Epic Muse shall wake another strain,
And sing of battles where, perchance, no stain
Or trace of blood is left, that hence shall show
The world that where no crimson torrents flow,
How dark some times and fearful is the strife,
That 's waged oft in the rough campaign of life.
This earth is but one vast, broad battle-field;
And all mankind are soldiers here, that wield,
Or are endowed by Nature with the power
To wield, some weapon 'gainst the foes each hour
And every where opposing Truth and Right,
And will oppose, till vanquished in the fight.
Aye, all are soldiers here, and *drafted* too;
And whether white or black, or false or true,
Though marching not to sound of drum and fife,
We 're mustered in, and bound to serve for life.
E'en Nature's self a varied scene presents,
Of warfare waged among the elements:
The howling tempests and the murm'ring rills
Wage ceaseless warfare with the granite hills,
That have withstood, and ever shall withstand,
The crumbling touch of Time's unsparing hand.
But most in social life must we contend
With foes whose seeming number has no end.
And foremost 'mong them '*Mrs. Grundy*' stands,
A stately, self-sufficient dame; whose hands
We oft may see in holy horror raised,
When some, unmindful whether blamed or praised,

Dare think, and boldly speak and act their thought,
Despite the Grundy force against them brought.
Aye, valiant soldiers, worthy of high rank,
Are they who, when assailed in front and flank
By popular opinion, stem the tide,
In triumph shouting '*Conscience is our guide!*'
And thus it ever is, turn where you will,
A fierce and desperate battle 's raging still.
Here Truth and Error in mad conflict meet:
Here Vice and Crime with Virtue must compete.
Go to the halls of trade, ride on each breeze
That sweeps across the briny, billowy seas,
O'er which the whitening sails of Commerce spread;
Aye, go where'er mankind hath dared to tread,
And you shall find ten thousand battle-fields,
Whose place and date no history reveals.
Philosophy and Science, too, can boast
Of warfare waged against a motley host:
They 've triumphed, too, on many a hard-fought field;
And soon all foes before their power must yield.
See next what foes Religion has to meet:
Their name is *Legion*, and their cloven feet
Are swift in all the ways of wickedness:
They loiter not as on toward death they press,
Victorious though the 'Prince of Peace' shall be,
And all the world yet bow to his decree.
Ambassadors of God, with faith sublime,
Toil on to rescue man from sin and crime.
Then give to these bold soldiers of the Cross,
Who strive, unmindful of the pain or loss,
To raise and save degraded man from shame,
Oh, give them honor and undying fame.
And Love, divinest passion of the soul,
Oh, who can measure, who its power control!
Its pure and sacred flame, for ever bright,
Still sheds its beams of warm and genial light,
To cheer Life's wounded, way worn soldiers on,
And give them strength to fight when Hope is gone.
Omnipotent! Almighty, and Supreme!
An all-absorbing, never-failing theme:
It conquers every selfish, base desire,
And kindles in the human soul a fire,
A bright, celestial fire, in every part,
That glows upon the Altar of the heart,
And purifies, and sanctifies, and burns,
Till 'earth to earth and dust to dust returns.'
So *must* it be; for 't is an attribute
Of Him whose power and wisdom none dispute.
By this we know its source is Heaven above:

It comes direct from God, for, '*God is Love.*'
What wonder, then, that man can not control
This passion when it once has filled the soul!
However brave and valiant he may be,
How vain from this the struggle to be free!
And Oh, how strange, how passing strange, it is
That man has not yet learned what powers are his.

Life, from its earliest to its latest breath,
Has constant warfare with Disease and Death.
Apostles of the Esculapian art
Exhaust their skill, with efforts to impart
Relief to suffering man, to soothe distress,
And ever kindly comfort, cheer, and bless.
There is a part for each to act, some place
On Life's great battle-field for each to trace
His destiny. Some fight like heroes, brave;
Some nobly fail; some find a coward's grave.
In this grand army see each rank and grade:
Most privates are; yet some are generals made;
Some colonels, majors, captains, too, there are;
Of corp'rals, though, the number 's greater far.
But all may yet be heroes in the strife,
And win a fame that shall not cease with life.

O ye who serve in Education's ranks,
Oft times for scanty pay, and scantier thanks,
Know ye, my friends, with what a mighty host
You now contend? Hear ye the vain, proud boast
That chief among the leaders of their crew
Are Ignorance, and Superstition, too?
That these, with their black banners broad unfurled,
Long time have stalked in triumph o'er the world?
And yet they stalk, presumptuous, hand-in-hand,
E'en through our own once 'proud and happy' land.
Be yours the task, O teachers, brave and strong,
To conquer these fierce advocates of wrong:
These hydra-headed monsters boldly smite;
These powers of darkness do not cease to fight.
And when discharged from active service here,
You 'll be promoted to a nobler sphere.
In this battallion, too, may woman serve,
And with unflinching will and steady nerve
She grasps the sword of Truth; and, being mailed
With Virtue, conquers oft where man has failed.

How oft in this sad war that desolates
The land that erst we called 'United States',
How often here fair woman frantic stands,
With weeping, pleading eyes, and outstretched hands,
With earnest prayers from every bursting heart
That God would give to her some humble part

To *act*, some place to *work*, something to *do*,
To help her father, sons, or brothers, through.
But though most visit not the bloody field,
Each may a power, unseen though mighty, wield;
A power to make some soldier's pathway bright,
To cheer his heart and nerve his arm for fight.
Whom God ordains to stay, your mission learn;
And you shall find, whichever way you turn,
Some path of duty plain, and which, if trod,
Will lead you safe through life, and hence to God.
O sister teachers! ye who fill the place
That but for you would now be empty space;
Ye who on Life's great battle-field now fight,
And with heroic valor aid the Right;
Ye who enlist in Education's band,
And serve beneath its banner broad and grand;
Who 'gainst its twice ten thousand foes contend,
And in its service life and strength expend;
Ye who with earnest hearts and willing hands
Toil hard for God, do all that He demands:
You, sister teachers, shall at least be made
Brevetted soldiers of the highest grade;
A bounty ample shall to you be given,
And an eternal pension *drawn on Heaven.*
Ye other friends of Education, too,
There is a mighty work for you to do;
Already thousands to the war have gone,
And duty says to each, to all, *toil on*
Where you can serve mankind and God the best.
If need be, rally to the high behest
That 's called so many from their quiet homes,
From cherished friends, from loved and loving ones.
If Duty dictates that you here remain,
Let not the voice of Conscience plead in vain.
If yet the school-room seem to be your sphere,
Stay there and *work;* but shed a silent tear
For those who *die* without one fond caress,
Defending rights that all alike possess.
And if you would promote our country's weal,
Inspire the minds of youth with patriot zeal;
Enkindle in each soul a loyal flame,
A love for freedom, and for virtuous fame.
And when at length Life's last great battle 's o'er,
And peace declared, and war is known no more,
May each brave soldier lay his armor down,
And for his faithful service wear a crown,
A *glorious* crown, that shall yet brighter shine,
As age on age doth more the soul refine.

CAMP PEORIA, OCTOBER 23D, 1862.

MATHEMATICAL.

THE CENTRE-OF-GRAVITY DISCUSSION, ONCE MORE.—As we expected, the criticisms of Z. Truesdel and J. W. O. have called out Mr. Wood in defense of his position. We have from him the following:

"In the last number of the *Teacher* I notice some objections to my correction. Perhaps I can give a better explanation. Suppose I support one end, and the prop supports the other; then I support 12 ft., and the prop supports 12 feet. (1) If the stick is moved so that it projects one foot beyond the prop, the prop supports 13 feet, and I 11: let it project 2 feet, the prop supports 14 feet, and I 10: project it 3 feet, the prop supports 15 feet, and I 9: project it 4 feet, the prop supports 16 feet, and I 8. Again: let the stick be in two pieces, one 8 feet, and the other 16 feet; let the two men with the bar support the piece which is 8 feet long; (2) let the other stick be supported by two men, one at each end. Then let one of the men place the end he supports on the end or centre (3) of the stick supported by the other two men: the weight upon the two men will be the same; for if we place an eight-pound weight on any portion of a stick resting upon the scales, the pressure on the scales will be the same. The effect upon the man supporting the other end of the stick which is 16 feet long will be nothing; for the stick supported by the two men with the bar presses neither up nor down. There are, perhaps, other and better explanations. A convenient way of obtaining the distance the bar is to be placed from the end is to take $\frac{1}{6}$ of the length of the stick.

"Will the Editor please give us his opinion? J. P. WOOD."

We do not perceive that Mr. Wood adds any thing, in this explanation, to his first letter, found on page 385. His explanation is particularly liable to censure because he simply makes assertions without advancing proof. He is certainly in error when he says (1) that if the stick "projects one foot beyond the prop, the prop supports 13 ft., and he 11," etc. J. W. O. has stated the principle so clearly, in the last number of the *Teacher*, that we will not spend more time on it. Practically, in the first case stated above by Mr. Wood, the prop would support $12\frac{12}{23}$, and he $11\frac{11}{23}$, in stead of 13 and 11 feet as he had it; in the second case, $13\frac{1}{11}$, and $10\frac{10}{11}$, in stead of 14 and 10; in the third, $13\frac{5}{7}$, and $10\frac{2}{7}$, in stead of 15 and 9; and, finally, $14\frac{2}{5}$, and $9\frac{3}{5}$, rather than 16 and 8 feet.

We do not clearly understand one or two points in the second sup-

position. How are the two men to support *with the bar* the piece 8 feet long? Are they to balance the stick on the bar? If so, should the third man place his end of the longer stick on one end (3) of the shorter, the equilibrium must be destroyed, and the stick will fall. The language used is far from clear: if we are to infer, however, that the intention is to have two men hold the stick 8 feet long, while the other rests upon it at any point, it is plain that the first two men will bear half the weight of the longer stick plus the weight of their bar, which is in this case the shorter stick. This, in our opinion, proves nothing for Mr. Wood or against J. W. O., as the two cases are not parallel.

Mr. Truesdel thinks we have misrepresented his solution to this problem. He says:

"The solution which I sent you is correct in every respect. I do not assume the answer when I say the centre of gravity of EB is at its centre F, which is 12 feet from H. The expression $x+\frac{24-2x}{2}=12$ft. proves that HF=12 feet. And it is evident that $\frac{1}{2}$AE+$\frac{1}{2}$EB=$\frac{1}{2}$ the whole length of the pole, or 12 feet. Again, HF=12 feet, whether the bar CD is placed 6, 4, or 2 feet from A. Suppose the bar is 2 ft. from A: then AE=4 feet, and EB=20 feet; but $\frac{1}{2}$ of 4 feet + $\frac{1}{2}$ of 20 feet = 12 feet = HF. Hence the distance HF being 12 feet does not control or determine the result. You will certainly do me the justice to publish my solution in the next number, inasmuch as you made a faulty criticism. I think you ought not to have published a criticism on my work without giving the entire solution."

We quoted directly from Mr. T.'s solution; and the whole sentence having been given, we are unable to perceive how he can have been misrepresented. We are sorry we can not now publish the entire solution; but having, as we thought, no further use for it, we destroyed it immediately after making up the last *Teacher*. We contend that Mr. T. did 'assume the answer' when he stated that the distance HF =12 feet. It would have been very easy for him to show that the distance HF is always equal to one-half the length of the pole, which in this case was 12 feet, when we should have had no fault to find. He is wrong, also, when he asserts above that 'the distance HF does not control or determine the result'. In every instance this distance is the *numerator* of the fraction representing the portion of the stick borne by the two men at the bar. (*Vide* last paragraph of J. W. O.'s solution, p. 467.) If Mr. T. still thinks we misrepresented him, will he favor us with another copy of his solution? ED.

"MR EDITOR; I can not agree with J. W. O. when he says that we invert the divisor, in the division of fractions, 'merely for convenience', and that this convenience consists 'merely in arranging the numbers to be multiplied on the same horizontal line, to avoid the chance of multiplying the wrong numbers'.

"I have taught my pupils that we inverted the divisor because, in every division of fractions, we must reduce both dividend and divisor to the same fractional unit before the true quotient can be obtained, and that by inverting the divisor and proceeding as in multiplication we reduce both to a common denominator and find their equivalent values and obtain the true quotient. Hence we invert the divisor to *shorten* the operation. Am I right? Please answer, and oblige

"M. V. B. S."

Clearly, the inversion of the divisor and the subsequent multiplication reduce the fractions to a common denominator and divide the numerator of the dividend by that of the divisor. We think, however, with J. W. O., that the inversion is not essential, but 'merely for convenience', to avoid the danger of a wrong multiplication. Some arithmetics, particularly the earlier ones, do not direct the inversion at all, but cross-multiplication in stead. Warren Colburn ('Sequel to Intellectual Arithmetic', p. 184) says "If the fractions are of different denominations, they must be reduced to a common denominator"; and "As the common denominator itself is not used in the operation, it is not necessary to find it, but only to multiply the numerators by the proper number to reduce them. *It will be found that this purpose is effected by multiplying the numerator of the dividend by the denominator of the divisor, and the denominator of the dividend by the numerator of the divisor.*" ED.

SOLUTION.—XXVIII. [By a scholar of the Brown School, Chicago. Who else among the scholars will send us solutions?] If John by winning 2 from James made the numbers equal, James must have had 4 more than John; because taking 2 from one number and adding it to another makes a difference of 4 between the numbers if they are equal. If James should win two more from John he would have as many as John had plus 8. If James had 8 more than John, John must have had 4. If John had 4 after he had lost 2, the original number which he had was 6. If James had 12 after he had won 2, the original number which he had was 10. Therefore, John had 6 and James 10 marbles. *Proof:* 6+2=8, 10—2=8, 6—2=4, 10+2=12. EDWIN WILLIAMS.

What has become of Pupillus, and Prof. W. D. Henkle? Have they deserted us?

NEGATIVE QUANTITIES.

Is there such a thing in the vast domain of God's universe as a *negative* quantity? I answer emphatically, *No*. Quantity is that which can be estimated or measured, increased or diminished. Hence, in the great Book of Nature there are no *negatives*, no quantities *less than* nothing,—algebras and algebraists to the contrary notwithstanding. The very *idea* of a quantity seems to imply *something real, something positive*. What, then, is the meaning of the *minus* sign when placed before quantities; and *how* shall it be interpreted? I answer, the *minus* sign has three meanings, which are easily understood.

First, then, it *indicates* an operation. Suppose, for instance, we are required to subtract 20 from 12. It can not be done: it is an impossibility. One might as well undertake to make a *pint* cup hold a *gallon* as to attempt to subtract a *larger* quantity from a *smaller*. It can not be done by Arithmetic: it can not be done by Algebra. *Reverently*, Almighty Power can not do it. What can we do? We can resolve 20 into its parts; for it is composed of parts. We can say that 20 is equal to 12+8. Now we can simply take 12 from 12 and place the *minus* sign before the 8 (−8), to indicate that there are 8 units more to be subtracted. This is all we can do. In this case it is evident that the *minus* sign is a symbol of operation. Query: I wonder whether the minus sign before the 8 changes its *nature*. Is it not −(+8)? It looks to me as though it still represented 8 *positive* units. There is a difference between 4 and +4. The former simply indicates *four* units, while the latter is not only an expression for *four* units but indicates that the 4 is to be added.

Secondly, the *minus* sign signifies opposition. Let us suppose that two individuals are at the Equator, and that one travels directly north 6 miles; the other travels directly south 6 miles. Distance north of the Equator is considered +, and distance south of the Equator is considered −. It might have been otherwise. The *reverse might* have been correct: distance north, *minus;* distance south, *plus*. The *signs* of the sines and cosines, tangents, etc., drawn in *one* direction are +, while those drawn in an opposite direction are −. The same can be said of *abscissas* and *ordinates* used in Conic Sections. In all these cases + and − have an opposition in meaning.

Thirdly, it is a symbol. Take sin. ^{-1}a and a^{-2}. The first is an expression for an arc whose sin. *is a*, and is read *The arc whose sin.*

is a. The second is a symbol of the reciprocal of the square of *a.* Again, what is the *absolute* difference between —6 and +6? Answer, 0. What is the *relative* difference? Answer, 12. If a man owes me 6 dollars, I consider the amount due *real* and *positive.* If I owe 6 dollars, I regard the amount just *as real* and *positive.* Are our algebraists correct when they say that $-2>-6$? In my opinion they are not correct. Minus 2 is not greater than minus 6 in any sense whatever, neither *arithmetically* nor *algebraically.* Suppose A travels 2 miles south of the Equator, and B 6 miles; which is the greater distance? One is —2, the other is —6. Draw two sines in the 3d or the 4th quadrant of a circle, or draw *ordinates* below the major axis of an ellipse, respectively 2 inches and 6 inches. It is ridiculously absurd to say the latter is the shorter.

Very many teachers do not comprehend fully what is meant by the *minus* sign. If I shall awaken thought on this subject my purpose in writing this article will be accomplished. J. V. N. STANDISH.

LOMBARD UNIVERSITY, NOV. 17TH, 1862.

EDITOR'S TABLE.

EDITOR'S CHAIR.

A TRIP.—To relieve the monotony of our life, and learn how the rest of the world moves, we took a run into Chicago a few nights since. What an idea, to lie down at nine o'clock on a comfortable lounge and get up for breakfast next morning nearly 200 miles from the starting-place. As we were bound for something new in school matters, the first place, of course to which we went was Friend Sherwood's, 118 Lake street. Here is the depot for all things new and pretty and convenient for the furnishing of schools, from a slate-pencil worth a trifle up to a globe worth $150. Here is apparatus to suit every body; maps, charts, cards, pictures, electrical machines, air-pumps, telegraphs, and tellurians; every thing, in fact, to furnish a school-house, except, perhaps, a door-scraper and a broom, and even these he would supply if applied to for a complete outfit. Sherwood is a pleasant, accommodating man, and has a store where a teacher may feel at home, to see and learn, even if he does not come to purchase. By the way, he has a new patent inkstand, which he thinks is about all that is needed in that line. We did not see it, however, but expect to soon.

From Sherwood's we went to see Friend Briggs, who is Principal of the Moseley School. Here we had the pleasure of meeting Superintendent Wells, who gave us a kind welcome and an introduction to some lady-teachers, who were kind enough to exhibit some primary classes in singing, marching, physical exercises,

etc., to our great satisfaction. From the lower rooms we advanced to the highest, where Brother B. was himself at work in the instruction of a large and interesting class in Mathematics and Natural Philosophy. Here we enjoyed a treat in having some very fine singing, Mr. B. leading the school. It is a pleasure to see the interest manifested in this department of education.

And here we would ask Why do not teachers visit more? We may read and study about the philosophy of teaching and the plans of working in school, and be but little benefited. A visit to a good school is better than a book, for there is the object-lesson before us, and there is the teacher to answer all our questions. We never omit to visit schools, for, good or bad, we always learn something.

Having learned that Mr. Briggs would take charge of the Mathematical Department of the *Teacher*, and having talked up other matters interesting and profitable, we retired, fully satisfied with the pleasures of the day.

Nine o'clock next morning found us at Mr. Wells's office by appointment. This is the practical educational centre of Chicago. In this place we had the pleasure of forming some new acquaintances and renewing some old ones. Being desirous of learning in detail the system adopted for keeping school records, Mr. Wells turned us over to Mr. Cutter, the gentlemanly Principal of the Washington School, who explained the whole plan clearly and satisfactorily.

From this place we found our way to Friend Eberhart's, School Commissioner of Cook county, where we were kindly welcomed. Having much to see and do, we were obliged to make a brief visit, and left with the promise of his Report as soon as it is published. Eberhart gets the credit of being the best commissioner Cook county has had.

We looked in at Root and Cady's Music Store, where every thing may be found in that department. A walk through Griggs & Co.'s mammoth book-store, where books of all sorts may be had, from the poem 'Who killed Cock Robin,' illustrated, costing one cent, to the Works of Wm. Shakspeare, costing $95. Here we saw books by the cord literally. Here ended our second day.

The next day was spent in the Churches and Sabbath Schools, much to our edification.

Monday morning found us at home again, ready to labor with renewed zeal and increased activity. This we shall remember as one of the particularly pleasant and profitable trips to Chicago.

The late Election.— As a public journalist we have to record the result of the election as it bears upon educational interests. Mr. Bateman, present Superintendent, was not reëlected. This is a result, we freely confess, not in accordance with our preference, and we regret it the more since it is the verdict of a political and not an educational election. It is unfortunate that political strifes are ever connected with educational men or operations. Our preference for Mr. Bateman, aside from personal regard, arises from the fact that he is an old professional teacher; and we did hope the political parties nominating candidates would have this idea in view, that men directly interested in and conversant with schools and school systems would have been selected. And not only this, Mr. Bateman during his official career has won for himself golden opinions which have reflected honor upon himself, the Profession, and the State. He has been emphatically a working Superintendent: in the office and in the Institute, in public and in private, he has been unremitting in his efforts to promote the cause. We hope some provision will be made to carry out Mr. Bateman's idea of codifying our school law, which he has so well commenced, and which he better than

any other man can complete. It is a very desirable work, and when done will be exceedingly valuable. In the language of another we may say, "The state has *lost* a first-rate *Superintendent*, and *gained* a first-rate *Teacher*."

But *Vox Populi vox Dei ;* and we submit, hoping that the new Superintendent will be as successful in promoting the educational welfare of the State as his predecessor. The cause is a precious one, too precious to sacrifice for personal considerations. We must all work that the educational progress be not impeded in these troublous and distressing times. While for the reasons above given we would have preferred his opponent, we will cheerfully waive all considerations and do what we can to further the plans of the Superintendent-elect, and by our coöperation with him secure the best result to the cause he represents.

Personal.— We are gratified to learn that our friend Charles E. Hovey, former editor of the *Teacher*, has been promoted from the rank of Colonel to that of Brigadier General. General Hovey, we salute you.

Rev. W. M. Baker, President of the Illinois State Teachers' Association, has been elected Chaplain of one of the Illinois Regiments, which is now at Frankfort, Kentucky.

A friend writing from the army says of him: "Mr. Baker is Chaplain with me, much to my pleasure and profit; a most excellent, versatile, skillful, cheerful, active man." We are glad to record his usefulness and worth.

Lieut. Jas. H. Blodgett, of Co. E, 75th Reg't, we are sorry to learn, was wounded in the recent battle in Kentucky near Perryville. He was struck in the calf of the left leg, and when heard of last was in the hospital doing well. All the officers in Co. E were either killed or wounded.

Rev. Alexander Clark, editor of *The Philadelphia School Visitor*, has been called to the pastorate of the First M. P. Church, New Brighton, Pa.

Cockneyism.— *Mistah Editah:* The-ah ah no few-ah than fou-ah ministus in ou-ah place, and num-ah-ous othus of ou-ah acquaintance, who have a singul-ah defect in thei-ah deliv-ah-y, o-ah (or) rath-ah thei-ah pronunciation, being unable to sound the lett-ah *r* when occ-uh-ing (occurring) in wo'ds o-ah syllables following a vowel. These pu'ssons have ou-ah hea-ah-tiest (heartiest) sympathy in so fah as thei-ah defect is nat-uh-al (natural) o-ah unavoidable; but we have the uncha-ah-tibleness to suspect that this, in gen-ah-al, is not a nat-uh-al but an assumed defect — assumed to give *prettiness* or peculia-ah-ty to thei-ah speech; and in so fah as *this* is the case, they have ou-ah seve-ah-est censhah (censure).

It is to be feared and regretted that this vice — we can call it by no other name — in pronunciation is on the increase, especially among young ministers of classical education.

Probably all persons who speak the English language pronounce the word f-r-o-m correctly; but why omit the sound of the *r* in f-o-r-m, and speak it as if it were spelled *faw-um?* The word e-a-r-t-h (*vide* Webster) is pronounced *urth ;* but the persons above alluded to pronounce the word as if it were written *with*, prolonging the *u* sound so as to make the word of the same length as when correctly spoken. And so of all other words and syllables containing an *r* following a vowel — they omit the sound of the *r* altogether.

Now we affirm that this mode of pronunciation is radically false, having no authority or sanction from any orthoëpist in the English language; and more than that, we believe its influence to be pernicious, having the effect to create disgust, in the minds of sensible people, toward those who so egregiously murder the king's English in their delivery. A minister who assumes an unnatural or unusual style of speaking or of pronunciation in order to give prettiness or singularity to his oratory gives manifest evidence of a want of appreciation of the solemnity of the work in which he is engaged — as an embassador of Jesus Christ sent to proclaim salvation to the lost; and when any people discover this lack in their minister, the word spoken will be likely to have little effect upon either class of his hearers, saints or sinners. Exchange.

The history of the above error is curious if true, and we rather guess it is true. There are certain parts of our country where this peculiarity of diction is prevalent. Almost all the people of the Slave States drop the R in the enunciation of their words. So also do a few of the New-Englanders who live along the coast; and the reason assigned for this deviation from pure English pronunciation is not that it is affectation or carelessness, but the result of association and education.

It is stated that there is no sound of R in any of the languages of the West Coast of Africa; consequently the Negroes were unable to learn that sound, and in the association of Negroes with whites, in the capacity of nurses and servants, the whites have suffered a corruption of language in this respect. As the same peculiarity exists in some parts of New England, the inference may be drawn that their *commercial* intercourse, in the days when such commerce was greater than at present, had by the exchange of men produced some change in their language.

If this may account for the peculiarity in many cases, it does not in all. We have known some folks to cultivate a black patch on their faces to appear fair by the contrast: we have known others to affect a lisp to be fascinating; and so we have seen some pretty little Miss Nancy, who had 'finished her education' and who wrote her name with an ie, indulge in the pleasing accomplishment of talking in the latest style of her institution. With those who have talked in this manner from infancy we have some forbearance, but for those who have cultivated it as a grace we can only feel contempt.

Col. Lorin Andrews.— We are pleased to find a beautifully-executed Lithograph of Lorin Andrews in the *Ohio Educational Monthly* for November. It is well that such honor should be paid to one who labored so faithfully for the educational interests of that State. Called to various positions of responsibility, he filled them all with a zeal and an enthusiasm and a fidelity that won for him the respect and confidence of all who knew him. The influence of such a man will live long after his name shall cease to be remembered, though thousands live now and will live to bless his name. He was a working man, a kind, benevolent, Christian gentleman, scholar, and soldier. Peace be to his ashes.

The *Ohio Educational Monthly* was one of the objects of his special regard. It has maintained a high rank among the educational journals of the day. It is the official organ of the Ohio State Teachers' Association, and is edited with much ability and success by E. E. White & Co., Columbus.

Drafted and Released.— Gov. Curtin of Pennsylvania has secured an exemption of school-teachers and county superintendents from the recent draft for soldiers in that State.

The disorganization produced in the schools by the removal of about 800 teachers by the draft and at least 1000 by volunteering was so great that serious injury would have resulted to the system, had not the Governor, who is an enthusiastic common-school man, interfered.

Thanks.— We feel grateful to our contemporaries the *Amboy Times*, *Clark's School Visitor*, the *New-York Teacher*, *Pennsylvania School Journal*, and the *Chicago Legal Adviser and Commercial Record* for their notice of our change of residence and their kind expressions concerning ourself. We shall try to merit and retain their approbation.

Diagram Method of Teaching English Grammar.— We have received another communication in opposition to the above method of teaching English Grammar, but will not publish it now, preferring to hear something said now inits defense. A short, spicy article will be welcome.

Lloyd's Maps.— From a careful examination of these maps we are satisfied that they are all the publisher claims. At the present time, when the positions and movements of our armies and those of the rebels engross public attention to the exclusion of nearly all else, but little satisfaction can be derived from consulting

the maps in general use. These, however, will be found eminently satisfactory in this respect, while for other purposes they are fully equal to any of those which cost many times their price. For further information consult advertisement. N.

Object Lessons.— A Manual of Elementary Instruction on this popular subject, on which practical teachers need all the information attainable, by E. A. Sheldon, has just been published by Chas. Scribner. The first of Prof. Guyot's series of Wall Maps, announced some time since as in preparation, will be issued by the same publisher on the first of January proximo. Other maps of the series will be ready soon. See advertisement. N.

To Subscribers.— All subscribers to the *Teacher* whose time expires with this number, and all others who intend to become subscribers for 1863, should send their subscriptions at once if they desire to have the volume complete. The January number will be published about the 20th of December, and no more copies will be printed than the demand up to that time may seem to render necessary.

The Publisher.

LOCAL INTELLIGENCE.

The Bureau County Teachers' Institute.—This Institute held its Fifth Annual Session in Princeton, and continued during five days.

The exercises were most ably conducted by Mr. Edwards, Principal of the State Normal University; Prof. E. C. Hewett and Prof. Metcalf, of the Normal; and Mr. S. M. Etter, School Commissioner of Henry county.

Prof. Hewett delivered a lecture on Monday evening in the Presbyterian Church. His subject was 'What for?'

Prof. Edwards closed Tuesday's exercises by a public lecture upon 'The Necessity of Universal Education'. In the afternoon of Wednesday Miss Emily Everett read a well-prepared and practical essay upon 'A very little of how and what to teach'. Miss M. L. Mercer read an affectionate and touching 'Tribute to a Teacher'. The evening of Wednesday was spent in listening to an essay by Miss L. A. Tower; subject, 'My Ideal Teacher', and selections from Shakspeare and Hood, by Prof. Edwards. Prof. C. D. Wilber contributed to the interest of the occasion by an address on Thursday evening upon 'The Natural and Mineral Wealth of Illinois'.

A series of resolutions was passed, and among the rest was one complimentary to the *Illinois Teacher* and recommending its circulation.

Fine musical entertainment was interspersed among the exercises in Geography, Grammar, Arithmetic, Elocution, etc., etc.

The officers for the next year are Newell Mathews, county School Commissioner, President; C. P. Allen, Vice-President; Samuel Jackson, Secretary; and W. B. Howe, Treasurer.

The meeting enrolled 93 members, and was singularly agreeable and profitable in all its exercises. All seemed pleased and benefited.

Decatur.— *Editor Teacher:* For some time I have intended to send you some local intelligence from this place, but the hurry connected with the commencement of school has prevented until now.

Our schools have been divided into four grades: Primary, Intermediate, Grammar, and High School. We have now enrolled about 800 scholars, and we employ 17 teachers; 4 gentlemen and 13 ladies. Of these three were members of the first class graduated in the Normal University. We claim that we are ahead of any city in the State in this respect. By a vote of the people the directors were empowered to erect a new school-house this fall. Mr. Randall was employed to furnish plans; but, owing to the great war excitement, it was found necessary to postpone the enterprise until next year. This is to be regretted, as our rooms are mostly rented, and, consequently, badly adapted to the wants of a

good school. We have but one building, which accommodates about 300 pupils. The following are names of teachers: E. A. Gastman, jr., Principal of High School and Superintendent; Mrs. Gastman, Assistant in High School; Edwin Park, Principal of Grammar School, assisted by Mrs. Brown and Miss Daniels; Homer Hatch, Principal of 2d Grammar School, assisted by Miss Butts. David Bigelow, Misses Taylor, Alderman, and Mackey, have the Intermediate Schools. Misses Mitchell, Allen, Zorger, Wilder, Mrs. Park, and Mrs. Murphy, have charge of the Primary Schools.

Mr. Shellabarger, one of our teachers of last year, and reäppointed this year, has gone as sergeant in the 116th Regiment, now in camp in this place. MACON.

FULTON CITY.— We have received a printed copy in pamphlet form of the regulations of Union Graded School in Fulton City, Whiteside county. The school contains five departments H. S. Hyatt is the Principal. The course of study marked out is regular and progressive, though we doubt whether it does not comprehend more than can possibly be accomplished in a school of that size. The Rules and Regulations are all good, and if carried strictly into practice and rigidly enforced will make a capital school. But, without saying any thing in disparagement of this school, we will suggest that paper rules never make schools. The 10th regulation, concerning children coming to school too early and staying at noon, is a most important one. If parents would reflect a little on that subject, the great moral and social evils resulting from this bad practice might be greatly obviated. We hope Friend Hyatt will endeavor to press its importance on those who send children to school, and also to enforce rigidly the 11th and 12th regulations upon the pupils. We wish him and his assistants all success.

MARRIED — In Chicago, Nov. 17, by Rev. Robert Collyer, Mr. GEORGE P. UPTON, Local Editor of the *Chicago Tribune*, and Miss SARAH E. BLISS, of the Foster School. May it ever be his *bliss* to own her *foster*ing care. B.

DEAD.— Rev. HARVEY CURTISS, D.D., President of Knox College, and formerly of Chicago, is dead.

NOTICES OF BOOKS, ETC.

McGUFFEY'S NEW HIGH-SCHOOL READER: for advanced classes. Embracing about two hundred Classic Exercises. Cincinnati: W. B. Smith & Co. New York: Clark, Austin & Maynard.

This book is designed as the most advanced of the Eclectic Series. It contains selections from the best of the English Classics. There is a great variety in the selections, giving a good opportunity for the cultivation of a fine taste for both prose and poetry.

McGUFFEY'S NEW JUVENILE SPEAKER: containing more than two hundred Exercises, Original and Selected, for Reading and Speaking.

McGUFFEY'S NEW ECLECTIC SPEAKER: containing about three hundred Exercises for Reading and Declamation. Cincinnati: W. B. Smith & Co. New York: Clark, Austin & Smith.

The perusal of these Speakers has been a rich treat to us, and we hope they will do as much good and afford as much pleasure to others. It is well to come back to first principles, to review frequently, in order to keep fresh our faith and our hope as well as our knowledge. We used to feed the flame of patriotism which was burning in our young heart by a constant perusal and rehearsal of those sterling sentiments of patriotic devotion and universal liberty which were found in the school-books of our school-boy days. Nothing could so rouse our feelings and fire our heart as the classic words "Give me Liberty, or give me

Death." Nothing would stimulate our patriotism more than that grand appeal "Sink or swim, live or die, survive or perish." Nothing would make our heart swell with pride and exultation like those thrilling words "Liberty and Union, now and for ever, one and inseparable." These things were an inspiration to us, and we believed in them. Believing in them, we were led by an association of idea to pin our faith to the Declaration of American Independence, and to indorse all that it contains. We were reared under the motto of "Virtue, Liberty, and Independence," and learned to look with glowing pride upon the triumphant escutcheon of a sister State bearing the motto "*Sic Semper Tyrannis.*" We believed in it; we could not help it; we did not desire to. All that we conceived of goodness, greatness, and glory, were embodied in that connection. We learned it at home from our mother, and we were not taught to unlearn and despise it at school. There it was "all spread abroad in letters of living light", and we loved to look upon it and think about it and admire it.

But a "new light dawned upon the minds of men." The revered Declaration began to be looked at with loving eyes no longer, and was pronounced a "bundle of glittering generalities." It was announced that the Fathers of our Nation had not fully understood their position, and were not men of broad views, who could fathom the depth their political principles would lead them into. It was found that the youth of the land were perverted by doctrines very respectable in their day, but fast becoming obsolete: doctrines which were prejudicial to the true interests of the country and the growth of King Cotton. It was discovered that our school-books had been full of pestilent heresies about Liberty and Independence. It was found that a certain class of people "had no rights which white men were bound to respect", and this was called 'law', and many said 'amen'.

It appeared that one of that class having no rights which a white man was bound to respect wickedly and maliciously, and possibly with malice aforethought, learned to read from the Columbian Orator that incendiary speech, "Give me Liberty, or give me Death." He took the hint, and choosing the former at the risk of the latter, skedaddled. Such things must not be, and it was solemnly agreed in Congress that men must not henceforth write, or talk, or sing, or preach, or pray, or print, any thing more about *Liberty*, because it was incendiary and might fire the "Southern heart." Book-publishers generally said 'amen', and thereafter no books were issued with any thing which would teach doctrines so fraught with danger and disaster. The expurgation was complete, and thenceforth all was safety and peace. So with our songs: we gave them up, and substituted the charming 'melodies' such as 'Oh Susannah', and 'Uncle Ned', to illustrate the beauty, simplicity and desirableness of that condition which renders beings capable of intellectual cultivation and improvement only contented and happy beasts of burden.

But thank God for the dawn of a better day, when a perverted public sentiment shall not expurgate all that is grand and noble, philanthropic, patriotic, and good, from our school-books. Let our children be taught again to sing the songs of Liberty, let them sit at the feet of the great and good of every age and learn sentiments which will incite them to live for and love their country. We will never despair of the Republic so long as our schools are used as they ought to be for the inculcation of "Virtue, Liberty, and Independence."

We bespeak a wide circulation for this new speech-book.

Preparatory Latin Prose Book: Containing all the Latin Prose necessary for entering College, with references to Kühner's and Andrews & Stoddard's Latin Grammars. By J. H. Hanson. 4th edition. Boston: Crosby & Nichols. 775 pp.

This book contains a neat and accurate map of Gaul and the adjacent Roman Provinces. The matter is compiled from Cæsar, Sallust, and Cicero, and sufficient is taken of each to enable the student to acquire the necessary training for him to enter the regular classes of college. The first object aimed at is to give a sufficient amount and variety to make a thoroughly-drilled pupil, and the second is to enable him to secure the knowledge of the language without the expenditure of so much money for the full editions of the above-named authors' works. A

complete Latin-English Vocabulary, with Geographical and Historical Index. Notes are appended. References are also made to the Grammar for the explanation of principles in difficult and idiomatic constructions.

Book-Keeping by Single and Double Entry: for Schools and Academies: adapted to Payson, Dunton & Scribner's Combined System of Penmanship. Boston: Crosby, Nichols, Lee & Co. Chicago: Geo. Sherwood.

The peculiar feature of this book is that those portions which are to be written by the learner are engraved in imitation of real *Manuscript Account Books*. The appearance of this book impresses us very favorably: it is plain, neat, and accurate, and we think well calculated for the purpose for which it is designed.

Harper's Series of School and Family Readers. By Marcius Willson, author of 'Primary History', 'History United States', 'American History', and 'Outlines of General History'. New York: Harper & Brothers.

The most beautifully embellished and illustrated series that we have yet seen. The distinguishing characteristic of these books is that they have been compiled with reference not only to instruction and drill in the Art of Reading, but also to the acquisition of knowledge in the several departments of Natural History. The idea is that a taste for reading must grow from what it feeds on: that if the desire for interesting matter is satisfied the pupil will read from choice; if from choice, with pleasure; if with pleasure, with not only intellectual but rhetorical advantage. They are a rich treat for children. The 'Rollo Books' and the 'Lucy Books' are not to be named with them. These books contain not only large selections from Natural History, but Bible Stories, and a considerable amount of miscellaneous matter.

A Manual of Information and Suggestions for Object Lessons in a Course of Elementary Instruction: adapted to the use of the School and Family Charts and other aids in Teaching. By Marcius Willson, author of 'Willson's School and Family Readers'. New York: Harper & Brothers. 336 pp.

Series of Colored School and Family Charts — 22 in number. Designed for a Course of Elementary Instruction in Schools and Families. By Marcius Willson and N. A. Calkins. New York: Harper & Brothers. Sheets, $7. Mounted, $9.

These are the most beautiful American publications we have seen. Six cards are devoted to instruction in Reading; six to miscellaneous illustrations of lines and measures, forms and solids, drawing and perspective, etc.; two to colors; four to Zoölogy; and four to Botany. These are intended to accompany the book as illustrations for object-lessons. Altogether they are the most completely adapted to this method of instruction of any that we have seen. With the large sheets there is a little box containing colored cards, which are admirably suited to teach the colors and their combinations.

Payson, Dunton & Scribner's Combined System of Rapid Penmanship: in 12 Nos. Revised and improved. Boston: Crosby & Nichols.

A fine system of Penmanship: pretty, plain, progressive, and practical.

National Series: Parker & Watson's Readers. By Richard G. Parker, A. M., and J. Madison Watson. New York: A. S. Barnes & Burr. Chicago: Geo. Sherwood.

We were much interested in a critical review of some of the numbers of this series recently made to us by a friend. They are a fine series of books, progressively arranged to meet the wants of all grades of pupils, from the lowest to the highest. There is a great variety in the selections, giving fine opportunity for the cultivation of every style of rhetorical recitation. The Fifth Reader is a large book, abounding in the choicest literary gems in prose and poetry. Prefixed to each selection is an account of the author, with circumstances of birth, education, character, and country, which is valuable to young persons who study to

acquire a knowledge of literary men and matters. The series is a valuable one, well illustrated and neatly put up.

Daily and Monthly School Record: for the use of Common Schools, Academies, etc. By A. S. Kissell & M. Ingalls. Davenport, Iowa: Luse, Lane & Co.

We have examined this School Register very carefully, and have no doubt that in the hands of a careful and exact teacher (and none other can keep any school record properly) it would be a very valuable assistant in the government of a school, and also desirable as a means of securing accurate school statistics. The importance of a good system of school records is, we think, not generally appreciated. This record contains *multum in parvo*; is convenient, and cheap. It is equally applicable to this State as to Iowa.

American Journal of Education. By Henry Barnard, LL.D. Hartford.

The September number is devoted to the examination of the Military Schools of France and Prussia, with their systems of management and instruction. It is a valuable compilation on the subject of which it treats.

The Monthlies.

The Continental for December completes the second volume. The contents are: 'The Union', third paper of the series, by Hon. Robert J. Walker; 'Something we have to Think of and to Do', by C. S. Henry, LL.D.; 'Cambridge and its Colleges'; 'A Physicians Story'; 'La Vie Poetique'; 'The Ash Tree', by C. G. Leland; 'An Englishman in South Carolina'; 'The Causes of the Rebellion', by Hon F. P. Stanton; 'On Guard', by Jno. G. Nicolay, Private Secretary to the President; 'Railway Photographs', by Isabella McFarlane; 'The Obstacles to Peace', a Letter to an Englishman, by Hon. Horace Greeley; 'Thank God for All', by Charles G. Leland; 'A Merchant's Story', by Edmund Kirke; 'The Freed Men of the South', by Hon. F. P. Stanton; 'Was He Successful?', by Richard B. Kimball; 'Gold', by Hon. R. J. Walker; and the 'Literary Notices' and 'Editor's Table'.

The fact that this magazine has during the first year of its existence attained a position and influence second to none in the country is incontrovertible evidence that its management is sound, and in unison with the popular taste. Warranted by its great success, some changes have been made, which bid fair still further to increase its influence and usefulness. The Hon. Robert J. Walker, and the Hon. F. P. Stanton, so well remembered for the bold stand they took for Freedom in the Kansas troubles, will, in future, control the political department, while Charles Godfrey Leland, who has edited the magazine from its commencement, and Edmund Kirke, well known as the author of 'Among the Pines', will manage the literary department. We hope that the coming year may see its already large and merited circulation in the West materially increased.

The Atlantic for December is an unusually good number. The contents are: 'The Procession of the Flowers', by T. W. Higginson; 'One of my Clients'; 'The Cumberland', by Longfellow,—the first piece he has written since the melancholy accident which darkened his home; 'The Fossil Man', by C. L. Brace; the conclusion of 'Life in the Open Air', by Winthrop; 'A Woman', by Rose Terry; 'About Warwick', by Hawthorne; 'Lyrics of the Street', by Julia Ward Howe; 'Mr. Axtell'; 'My Hunt after the Captain', by Oliver Wendell Holmes; 'Waiting'; and the 'Literary Notices'.

This number completes the tenth volume of the *Atlantic*. The publishers promise for the next year even better things than we have had this. The January number will be particularly rich in good things. It will contain a Christmas Story by the author of Margret Howth; an essay by Gail Hamilton; 'The Record of a Gifted Woman', by Hawthorne; 'In the Half-way House', by J. R. Lowell; 'A Letter to the Women of England', by Mrs. Stowe; besides other contributions by always welcome American Authors.

Received, too late for notice this month, *Sanders's Rhetorical Reader*, the fifth book of the new Union Series. B.

MUSIC.—Horace Waters, 481 Broadway, New York, sends us a new and enlarged edition of the Patriotic Song-Book, suited for the Army, the Navy, the Home, and the School. To be sung during the war by the uprising millions of men, women and children who stand by the flag of our country and despise traitors.

This is the book to inspire the children with patriotism, to lead their young minds and tender hearts to the love of home and country. This is the book to send to the soldier to let him know you think of him and wish to cheer him. Price 10 cents. $8 per hundred.

The same publisher sends us the song entitled 'We are Coming, Father Abra'am, Six Hundred Thousand More'. Our musical editor says it 's a good thing.

ILLINOIS STATE TEACHERS' ASSOCIATION.

NINTH ANNUAL MEETING.

THE Ninth Annual Meeting of the State Teachers' Association will be held at Rockford, commencing Wednesday, December 31, at 9 o'clock A. M., and closing on Friday of the same week. The exercises will be conducted in Metropolitan Hall. In view of the shortness of the time given to the Committee, nothing more than a general programme can be issued at present.

Lectures will be delivered on Wednesday and Thursday evenings. A part of each day will be devoted to Lectures, Addresses, and Essays. The remainder of the time will be occupied in Drill Exercises, Discussions, and Miscellaneous Business.

The following subjects will receive the attention of the Association: Object Lessons; Gymnastics; Graded Schools; Geology; Oral Lessons in History; Orthoëpy, and its Representatives; Map Drawing; Grammar; The best method of Teaching Beginners to Read; Miscellaneous Questions proposed in writing by members of the Association.

The list of invited Lecturers is as follows: A. L. Chapin, President of Beloit College; Hon. Newton Bateman; Prof. C. D. Wilber, of Bloomington; Prof. J. D. Butler, Madison University; W. H. Wells, Superintendent Public Schools, Chicago; Alex. M. Gow, Editor *Illinois Teacher*; A. S. Welch, Principal of Michigan State Normal School; Richard Edwards, Principal of the Illinois State Normal University; John P. Brooks, State Superintendent elect.

Teachers can obtain free entertainment by signifying beforehand their intention to attend the meeting. They will address on this matter Henry Freeman or G. G. Lyon, Rockford, Illinois.

ALEXANDER KERR,
O. C. BLACKMER,
G. G. LYON,
HENRY FREEMAN.
} Committee on Programme.

REDUCTION OF FARE.—The Galena and Chicago Union, the Chicago, Alton and St. Louis, the Chicago and Northwestern, and the Logansport, Peoria and Burlington Railroads, have agreed to give half-fare rates to those attending the Association. Persons will pay full fare going, and be passed back free on presenting the Secretary's certificate of attendance.

The Illinois Central, the Chicago, Burlington and Quincy, and the Chicago and Rock Island Railroads, have refused to grant this favor.

The other railroads will be seen immediately, and announcements made in the January number.

Trains leave Chicago from the Wells-street depot, on the north side, at 11 A. M., 4 P. M., and 11.30 P. M., arriving at Rockford in about four hours.

S. A. BRIGGS.

☞ *A copy of the book will be sent per mail, prepaid by the publishers, on receipt of the price,* $1.25.

JUST PUBLISHED,

A Manual of Elementary Instruction,

FOR THE USE OF

PUBLIC AND PRIVATE SCHOOLS AND NORMAL CLASSES,

CONTAINING A GRADUATED COURSE OF

OBJECT LESSONS.

By E. A. SHELDON,

Superintendent of Public Schools, Oswego, New York,

ASSISTED BY

MISS M. E. M. JONES and PROF. H. KRUSI.

The work clearly and fully exhibits the most approved methods of

DEVELOPING THE FACULTIES of CHILDREN,

By means of Oral or Object Lessons on

COLOR,	SIZE,	READING,	PLACE, OR GEOGRAPHY,
FORM,	WEIGHT,	SPELLING,	ANIMALS,
NUMBERS,	SOUND,	DRAWING,	PLANTS,
OBJECTS,	LANGUAGE,	HUMAN BODY,	MORAL INSTRUCTION.

It is the largest, most complete, and reliable work on the subject yet published in this country; and the extensive PRACTICAL experience of the authors must make it a useful book for teachers

PROF. GUYOT'S MAPS.

The first Map of Prof. GUYOT'S SERIES OF WALL MAPS,

SOUTH AMERICA, Five by Six Feet,

will be published on 1st January, to be followed by

MAP OF UNITED STATES,

WHICH IS NEARLY READY.

Prof. GUYOT'S Maps will give the results of the most recent explorations and information, and will be found to be the most complete and reliable Physical and Political Maps, and superior to any published in this country or Europe. Great pains have been taken with the mechanical execution.

CHARLES SCRIBNER,

Dec. 1862.] 124 Grand-street, New York.

NEW TESTIMONIALS.

ALLEN'S

PRIMARY GEOGRAPHY!

ILLUSTRATED WITH NUMEROUS

Object-Engravings and Pictorial Maps.

Quarto, 56 pages. Printed in oil colors. Retail price 40 cents. Sent for examination, post-paid, to any teacher on receipt of 25 cents.

This is the first of a new Geographical Series, composed on a plan somewhat new, and yet generally received by the best educators as the best, and got up in the best style of illustration, paper, type, and printing. If children are not attracted at first sight by the book to the subject of which it treats so admirably, and if their interest is not maintained to the last page, we shall be greatly mistaken. The author, as we know from many opportunities of hearing him, has an uncommon power in interesting teachers and parents at the institutes and conventions in the general discussions of the best methods of organizing and instructing schools; and in this little manual he shows himself equally competent in presenting, in detail, the elementary facts of one important study. The subject-matter and the order of the lessons, with the striking and appropriate illustrations of the great features and facts of each lesson, the tastefully constructed and printed maps, and the suggestions to teachers how to use the skeleton lessons on objects, and the beautiful representations and brief descriptions of all the principal animals and plants at the close of the book, make, on the whole, the best Primary Geography we have examined. We commend it to the examination of school officers and teachers.

HENRY BARNARD, LL.D.,
American Journal of Education.

It affords me much pleasure to see in this book a decided advance in the right direction.

I hail with gratitude these indications that the old methods of presenting dry and uninteresting details of statistics, isolated facts, or the mere location of places, to the minds of children, all having no real connection with the natural flow of thought, or the things which come within the range of their senses, the world in which they move and think, but only hanging as dead weights on the memory, are giving way to the more natural and philosophical methods of treating of living forms; of men, their modes of living, the kind of work they do; of animals and plants, and their adaptation to the climate and soil in which they live and grow; the relation of all these things each to the other, to ourselves, and the world in which we live. Children love to look at the pictures of things they can not see: and this representation of the trees, the staple productions, the animals, and the industries of the people, as *a part of the map of the country*, is a new and invaluable feature in this little Geography, and one that I shall lose no time in adopting in our schools. Pictures convey instruction and make impressions upon the minds of children as no language can. I would give more for the real impressions and knowledge a child would gain in his pastime in looking over these beautiful maps than for all he ordinarily gets in the primary school, under the old method of teaching by question and answer. I bespeak for this little book a hearty welcome on the part of the educators of this country.

It comes in at the time when we most feel its need. I trust both author and publisher will be amply repaid for this benefaction.

E. A. SHELDON,
Superintendent Public Schools, Oswego, N.Y.

I am happy to answer your inquiries in regard to what I think of the use and worth of Allen's Primary Geography on the Object-Method of Instruction.

I introduced it into our schools last term, and have watched its workings with care. I value it very highly, and believe it will make a new era in teaching geography. The dry bones of geography have clattered and shaken long enough in schools. I am glad to see a book on the subject with muscle, nerves, brain, beauty, and life. This little book is rich in suggestions, and is grounded in the nature of children. It wakes up more thought and interest in a class in one lesson, under a live, earnest teacher, than will generally be done in week by a text-book of the old style. It works well, and both teachers and pupils like it.

The author has added much to our methods of teaching geography, and the publishers deserve great praise for the elegant engravings and beautiful typography in which the thought is dressed.

L. E. HOLDEN,
Superintendent Public Schools, Tiffin, O.

We, the undersigned teachers, who have used the Geography, concur in the foregoing statement.

ADDIE APPLEBY, *First Secondary School.*
MARY M. EBBERT, *Second Secondary School.*

J. B. LIPPINCOTT & CO., Philadelphia.

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MALE OR FEMALE AGENTS,
TO SELL
LLOYD'S NEW STEEL PLATE COUNTY COLORED MAP OF THE UNITED STATES, CANADAS, & NEW BRUNSWICK.

From recent surveys, completed August 10, 1862; cost $20,000 to engrave it, and one year's time.

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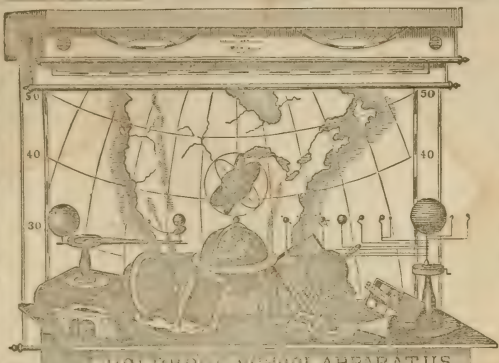
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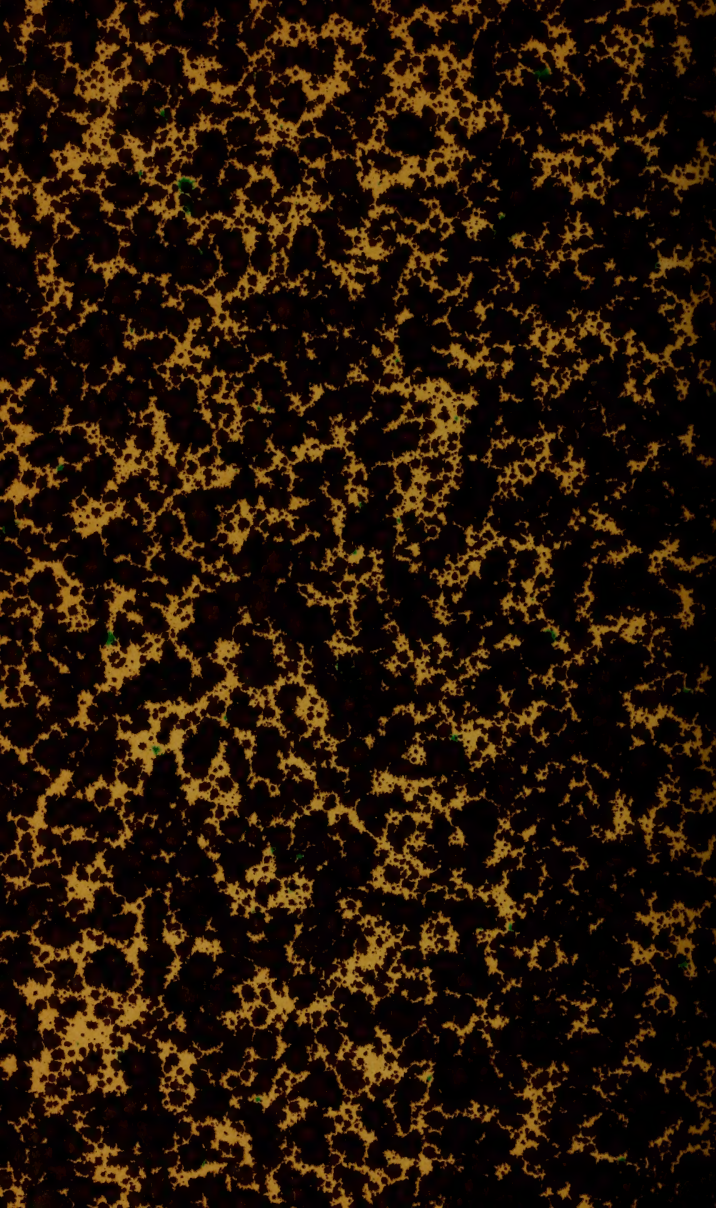
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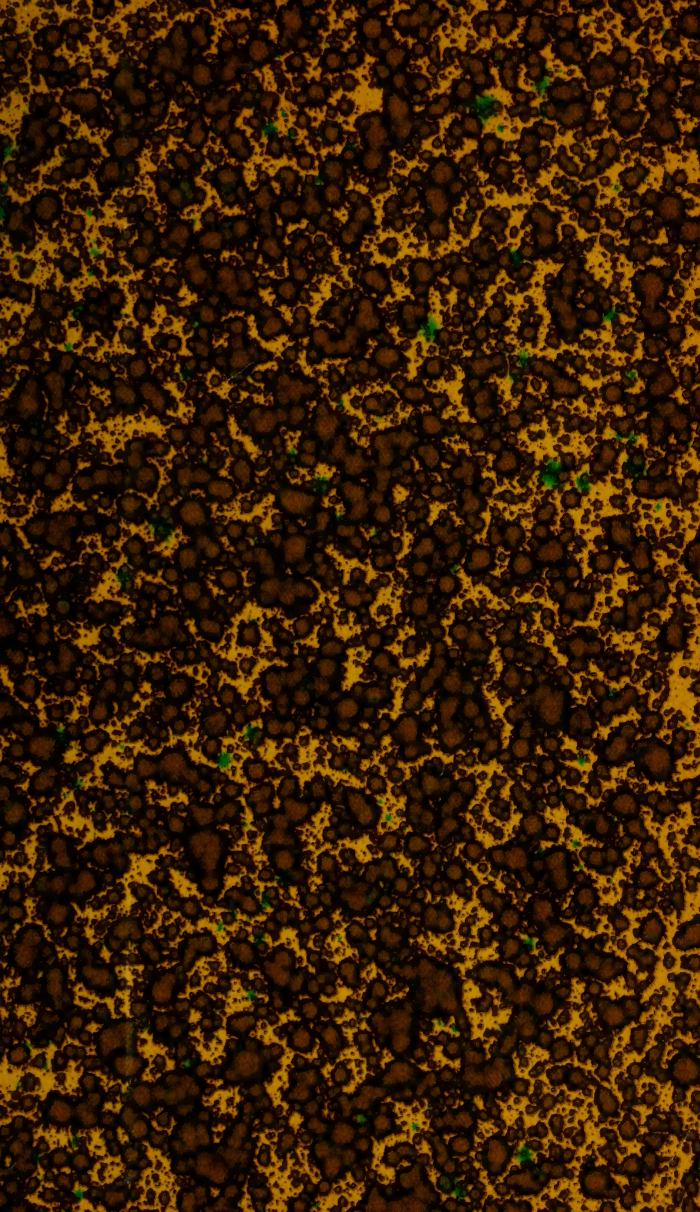
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